STANDARDS
The aim of the module is to enable the candidate to extend and consolidate clinical knowledge and skills gained at undergraduate level, and to develop an in-depth understanding of the application of that knowledge in a practice environment in relation to Veterinary Diagnostic Imaging.

AREA COVERED
Specifically, this module relates to diagnostic images obtained with low power X-ray equipment, i.e. the distal limb up to the carpus and tarsus, and the head.

ASSESSMENT STRATEGY FOR THIS MODULE
It is suggested that this module could be assessed by the following methods:

- A case report of up to 2,500 words in length. This case should be selected to demonstrate the candidate’s ability to use the competences that have been acquired to cope with a challenging situation, rather than necessarily using classic “textbook cases” of particular conditions. It should be presented “editor-ready” in a format appropriate to one of the main veterinary journals. Illustrations should be in a digital format and demonstrate the important features of the case.

- A series of unseen diagnostic imaging cases (minimum 6 sets of films) reported, blinded to history and other case details, under examination conditions. Twelve minutes should be made available for each set.

- A minimum of two unseen sets of films marked up to test radiographic anatomy, with a similar time allowance to that provided for the unseen cases.

MODULE CONTENT
At the end of this module, candidates should be able to:

- Recognise faults due to defects in processing and film handling, and deficiencies in film identification; recognise problems relating to density, contrast and sharpness, due to inadequate radiographic procedure; and recognise, from films, deficiencies in radiation safety procedures.

- Recognise and describe normal radiographic anatomy – candidates should possess a detailed knowledge of the relevant normal radiographic anatomy of the horse and its variation with breed and age.
• Apply the **principles of radiological interpretation** – the recognition of tissue types; formation of shadowgraphs; effects of superimposition and multiple shadows. Changes in opacity, size, shape, position and function of organs. The use of simple positional and contrast aids to elucidate radiographic problems. The applications of these basic principles to the evaluation of radiological signs in relation to clinical problems of the distal limb and head of the horse.

• Understand the principles of and apply **diagnostic ultrasonography** to problems affecting the musculoskeletal system of the distal limb.

**COMMENTARY ON THE CONTENT**
Interpretation applies to the diagnostic radiological features of the more commonly encountered clinical conditions seen in veterinary practice:

**The Head** Common abnormalities affecting the skull, nasal chambers, sinuses, teeth, jaw, guttural pouch, hyoid apparatus, pharynx and larynx. Differential diagnoses.

**Musculoskeletal System** Common abnormalities affecting bones and joints up to and including the carpus and tarsus. Fractures, dislocations, inflammatory and degenerative conditions. Congenital and developmental abnormalities, metabolic disorders. Trauma. Differential diagnoses.


**Special techniques** Candidates should be familiar with the general principles of contrast examinations and the performance and interpretation of the more commonly used techniques. They should understand the principles of ultrasonography and, in particular, its application to soft tissue problems of the distal limb of the horse.

**Note on choice of cases:**
The scope of the examination is related to those conditions likely to be encountered in general equine veterinary practice.