



THE WORSHIPFUL COMPANY OF FARRIERS

SYLLABUS FOR ASSOCIATE OF THE WORSHIPFUL COMPANY OF FARRIERS (AWCF)(2017)

The AWCF Examination is conducted in modules, one Practical and the other Knowledge, as detailed in this Syllabus. Modules may be taken in either order. On passing the first module, candidates are required to attempt the second module within the next two sessions ie within approximately one year. The module passed will remain valid for 3 years, after which time candidates will be required to retake both modules. Candidates achieving 70% or more in either part of the practical module will be exempt that part for a further 2 years. Candidates who have passed the Knowledge Module and achieve 70% on their shoe board in the Practical are exempt from the requirement to bring a shoe board for a period of 2 years. There are no exemptions for the Knowledge Module; it must be achieved at one sitting. The modules will NOT be individually certified by the WCF; however the Registrar will record the successful completion of each module and issue an AWCF certificate once both have been completed. Only after successful completion of both modules will candidates be permitted to use the post nominal AWCF.

The total time for the Practical Module is 3 hours, and the total time for the Knowledge Module is 4 hours, excluding in each case any extra time awarded by the examiners. In the Knowledge Module candidates must achieve 50% in each section and 60% overall to pass the module. However, in the Practical Module, 60% must be achieved overall with 60% in the live shoeing test and 50% in the Modern Farriery part.

The AWCF is an English language examination. All farriery and specialists terms are to be understood as in the current UK English usage.

1. PRACTICAL MODULE

1.1 Candidates' Exhibition of Shoes. (50 marks/450 scaled down to 100 for 1.1. and 1.2)

Each candidate is required to bring 10 shoes made by him/herself prior to the examination. The detailed requirement can be found under the Knowledge Module at 2.3 Candidates' Exhibition of Shoes.

1.2 Live Shoeing & Shoemaking. (400 marks/450 for scaled to 100 for 1.1. and 1.2) Time: 2 hours

Candidates may be asked to repeat or make shoes additional to the 10 exhibition shoes produced for the examination. Additional time will be allowed at the examiners' discretion. The candidate will make, fit, and nail on a pair of shoes as instructed by the examiners. A candidate may be required to make to the required standard any of the shoes specified on the List of Horseshoes shown on pages 3 & 4. Tooled and fullered shoes will not be requested, but non-ferrous metals are permissible, subject to the approval of the examiners.

Shoes identified on the List of Horseshoes suitable for Shoe Exhibition shown on page 7, may be submitted by candidates as examples of their craftsmanship in making these shoes themselves, but they will not be required to make and fit them during the examination.

1.3 Modern Farriery (40 marks)

Time allowed: 1 hour

The candidate is required have sufficient theoretical knowledge to support his practical work. He must be able to discuss and may be requested to perform hoof-curettage, normally on a morbid specimen, or to demonstrate hoof repair, or any other practical farriery treatment, including glue-on shoes*. Candidates will normally be expected to bring with them a selection of their preferred materials and size 5¼- 5½ inch shoes to deal with a range of problems. A sound knowledge of farriery and its relationship to young stock is essential.

* Lists of Procedures and Technical Processes which may be examined are attached on pages 5 & 6.

2. KNOWLEDGE MODULE

2.1 Written Paper (100 marks)

Time allowed: 2.5 hours

The question paper will be divided into 3 sections and will comprise 6 questions. A total of 5 questions, each worth 20 marks, must be answered, thus Candidates must select one question which they do not answer. The sections contain the following subjects:

Anatomy. Outline drawings will be provided to the standard as exemplified by Goody. Candidates are expected to name the parts shown and identify the areas affected by nominated conditions. Candidates are required to be fully conversant with the complete skeletal structure of the equine.

Physiology and Function. Candidates are required to demonstrate a knowledge of the bio-mechanical relationship between the anatomical structures of the limb, and also the pathology of conditions affecting the foot and limb.

Farriery Knowledge. Candidates are required to demonstrate a knowledge of how farriery can affect gait and conditions of the foot and limb.

2.2 Live Horse and Diagnostic Imaging Assessment (60 marks)

**Time allowed: As required
(20-40 minutes per section)**

2.2.1 Candidates will have to demonstrate a thorough knowledge of static and dynamic conformation assessment of one or a number of horses. They will have to discuss a detailed shoeing plan for the given horse/horses taking into consideration the candidate's own observations during the assessment. A scenario will be provided by the examiner. This part of the examination will normally be conducted by the Senior Examiner. **(20 Marks)**

2.2.2 The candidates will be expected to demonstrate a thorough knowledge of surface anatomy on a live horse and discuss commonly encountered pathologies related to the practice of Corrective Farriery. Each candidate is expected to have a clear knowledge of, and be able to discuss, diagnostic images of the lower limb, below and including the knee and hock. This will be conducted in two parts separately by the Veterinary Examiner and normally the Farrier Examiner. Veterinary aspects including pathological conditions and diagnostic imaging. **(20 Marks)**; Surface anatomy and farriery aspects **(20 marks)**

2.3 Candidates' Exhibition of Shoes (marked as part of the Practical Module)

Each candidate is required to bring 10 shoes to both the oral and the live shoeing parts of the examination. The shoes must be made by him/herself prior to the examination. At least 4 shoes should be traditionally forged from bar. Examples of hand fullering, forge welding and plain-stamped are expected. The remaining 6 shoes should include some hand forged shoes, but may also demonstrate innovation, fabrication and materials other than steel. Shoes may be adapted and/or constructed from manufactured items as well as hand made shoes. Used shoes may be submitted if relevant to a candidate's own experience and representative of the candidate's own work. Tooled swaged shoes are not required where proprietary bar stock is available, but may be submitted.

Shoes are required to be stamped at the Examination Centre with the number allocated to each examination candidate, and they will be returned to candidates after the examination. Candidates should be equipped and prepared to repeat any of the 10 submitted shoes, if required to do so by the examiners. During the oral examination, the examiners may ask the candidate to explain the practical application of any shoe that is submitted. The exhibition of shoes is required for both modules, and shall usually remain on display at the Examination Centre until the each module of each candidate for that session has been completed.

2.4 Oral Examination (40 marks)

Time allowed: As necessary (normally 15-20 minutes)

The oral examination takes place after the written paper and the live horse assessment test when each candidate meets all the examiners involved to discuss and answer questions on any points that the examiners wish to raise, including reference to the candidate's horseshoe exhibition, which must be brought to the oral as well as the live shoeing tests. The oral examination provides the examiners with the opportunity to confirm the marks awarded throughout the examination module.

LIST OF HORSESHOES

A candidate may be required to make and fit to the required standard any of the shoes specified on the List of Horseshoes shown below for the examination:

Listed below are the types of shoe, their description, reasons for application, types of horse and material etc. Clips and Fullering to Examiners' requirements.

1. Elevated Heel Shoe.

For altered hoof-pastern axis and foot-limb Anterior/Posterior relationship.

2. Elevated Heel Shoe Variations.

| | |
|-----------------------------|---------------------------------------|
| Spavin Shoe | - Hind, wedge heels, set toe. |
| Curb Shoe | - Hind, graduated heels, rolled toe. |
| Navicular Shoe | - Front, graduated heels, rolled toe. |
| Bilateral Sidebone | - Front, graduated heels, rolled toe. |
| Graduated Barshoe | - Anterior/Posterior imbalance. |
| Graduated Eggbar | - Anterior/Posterior imbalance. |
| Unilateral Raised Heel Shoe | - Mediolateral imbalance. |

3. Unilateral Sidebone Shoe.

Traditional shoe design to follow wear pattern and allow expansion to hoof capsule.

4. Interference Shoes – Variations.

Dub-toed shoes, hind shoe for forging.

Toe preventers and brushing shoes for interference (speedy cutting, brushing and scalping).

5. Barshoe Preventer.

6. Wide-Webbed Shoe.

Shoe for Pedalosteitis, sole cover, bruised foot.

7. Wide-webbed Shoe Variations.

Wide-webbed Barshoe, to give additional support.

Wide-webbed Deep Seated, to give extra sole clearance.

Wide-webbed Deep Seated Barshoe, as above.

Wide-webbed ground safed Bar Shoe or early breakover shoe

8. Bar Shoe (Straight Bar Shoe).

All types, steel, aluminium. Traditional shoe for corns, hoof wall lesions, stabilising hoof capsule.

9. Bar Shoe Variations.

Deep Seated - Flat or dropped sole.
Bar set away from frog
Bar set away from ground
Unilateral Raised Heel Barshoe - Mediolateral imbalance.

10. Eggbar.

All types, steel, aluminium. As for bar shoe, ovoid in shape (apex to rear) plus extra caudal support and Anterior/Posterior alteration for navicular syndrome/posterior third lameness.

11. Eggbar Variations.

Ringshoe, as for eggbar, more oval/circular with less caudal but more Mediolateral support.

12. Mediolateral Extension Shoe (Medial or Lateral Extension Shoe).

All types, steel for mature horses; aluminium for foals in treatment of angular Limb Deformity.

Shoe extending horizontally (from toe to heel) medially or laterally to give support and improve medio-lateral foot/limb alignment.

13. Mediolateral Variations.

Medial or lateral extension bar, to give full support to conformation abnormality.
Medial or lateral extension ringbar, as above.

14. Half Heart Bar Shoe.

A unilateral support shoe for localising support to an individual area and used for heel damage and mediolateral imbalances.

15. Calk and Feather.

Hind conformation defect.

16. Lateral Extension and Feather.

Hind conformation defect.

LIST OF PROCEDURES

The following are the procedures which a candidate for the Associateship Examination is expected to perform competently at the examination:

The candidate is required have sufficient theoretical knowledge to support his practical work. He must be able to discuss and may be requested to perform hoof-curettage, normally on a morbid specimen, or to demonstrate hoof repair, or any other practical farriery treatment, including the procedures listed below. Candidates will be expected to bring with them a selection of their preferred materials (including size 5¼- 5½ inch shoes that they would use to glue on) to deal with a range of problems. A sound knowledge of farriery and its relationship to young stock is essential.

Listed below are the procedures together with descriptions, materials and equipment etc., which may be requested at the examination.

1. **Abscess Search** Locate, ventilate and treat; farrier's tools.
2. **Hoof Wall Resection** Removal of a section of the hoof wall; farrier's tools and/or dremel.
3. **Hoof Wall Repair/Extensions/ Seedy Toe/White Line Disease** Debride loose and necrotic horn, rebuild with composite repair material; repair kit; Section or curettage of defective; farrier's tools and/or dremel
4. **Cracks** Repair using own choice of method and materials (screw & wire, screw & fibreglass, compound patch, lace patch), farrier's tools and/or dremel, drill, appropriate materials.
5. **Glue on Shoe** Steel/Aluminium/Composite (shoe size 5¼- 5½ inch)

Procedures carried out on sensitive tissue must be performed under appropriate anaesthesia induced and supervised by a Member of the Royal College of Veterinary Surgeons.

LIST OF TECHNICAL PROCESSES

A candidate is expected to be knowledgeable about the following technical processes and the general use of acrylics, polymers and silicones. He must be able to discuss and may be requested to perform hoof-curettage, normally on a morbid specimen, or to demonstrate hoof repair, or any other practical farriery treatment from the list below.

1. Glue-on Shoes
2. Degreasing
3. Repair Materials and Adhesives
4. Hoof Treatments
5. Hoof Pads
6. Cushioning material

Candidates will normally be expected to bring with them to the examination their preferred materials. This includes shoes that they may glue on (Size 5¼ -5½ inches). Alternatively shoes to glue on may be forged, but no extra time is allowed for this in the examination. Candidates will be allowed to use the product with which they are familiar.

Note:

All acrylics, polymers, and silicones etc are to be used strictly in accordance with the requirements of Health & Safety at Work legislation and the manufactures' instructions. This includes the use of rubber gloves and face masks as required.

LIST OF HORSESHOES SUITABLE FOR SHOE EXHIBITION

1. **French Bar** Weak/collapsed heels – bar width 2/3 length of frog, solid bar (heavy) or set away from ground
2. **“Z”-Bar Shoe** For relieving or floating heel.
3. **Heartbar**
(Frog Support Shoe, Column Support Shoe) all types, steel, aluminium.
For laminitis in conjunction with dorsal wall resection, hoof wall lesions, lesions to laminal Bond.
4. **Heartbar Variations**
Eggbar-heartbar, combining caudal support with bone column support of full heartbar frog plate.
Open-toe heartbar.
“Z”-bar heartbar, for floating heel and column support.
5. **Patten Shoe (Rest Shoe, Raised Bar Shoe) all types, steel.**
Traditional shoe offering elevation and caudal support, deep digital flexor tendon lesion.
6. **Fetlock Support Shoe (Swan-neck Shoe) all types, steel.**
Traditional shoe for suspensory ligament injury providing cradle support to fetlock.
7. **Fishtail (Caudal Extension Shoe) all types, steel, aluminium.**
Shoe with bar extending horizontally under fetlock; for flexor tendon lesion, post fracture cast causing toe elevation.
8. **Hospital Shoe (Treatment Plate Shoe) all types, steel or aluminium shoe, aluminium plate.**
Bar shoe with removable plate bolted on; puncture wounds, post surgery, with heartbar in cases of prolapsed distal phalanx.
9. **Hospital Shoe Variation.**
Walking-plate shoe, as above, but with plate at toe lodged in or under shoe to allow exercise.
10. **Fracture Shoe.**
Continuous Rim Shoe – Rim running from heel to heel enclosing hoof capsule, usually filled with acrylic.

Knowledge syllabus for AWCF Candidates.

Objectives.

The AWCF examination should be viewed as a major stepping stone towards FWCF. The level of theoretical knowledge required at AWCF is not significantly less than for a FWCF, however teaching and presentation skills are not required at this level nor are candidates asked to prepare an original thesis. This is the highest level at which a candidate's knowledge will be tested by written as well as oral examination.

The AWCF should have a thorough knowledge of the Anatomy and Physiology of the structures of the limbs. The limb up to and including the carpus / tarsus should be known in detail, and there should be a broad understanding of higher structures.

Candidates should have an understanding of the pathophysiology of the common causes of lameness and be thoroughly acquainted with all the more commonly used corrective shoes, both in traditional materials and in modern synthetic materials.

The examiners will expect candidates to have developed their own approach to common shoeing problems, and to be able to apply their own experience to the Knowledge part of the examination. Candidates will be expected to use theoretical knowledge to solve problems set in the examination. Candidates should also appreciate that Farriery is a constantly developing subject and should be able to demonstrate knowledge of current publications and theories.

The Syllabus includes all the Knowledge elements of the DipWCF examination. In addition: -

ANATOMY.

The Candidate must have a thorough knowledge and understanding of the anatomy of the limb from and including the carpus (tarsus) distally.

The topographical anatomy of the bones, blood vessels, ligaments, tendons joint capsules and nerves must be known in detail.

The structures of the foot and variations between the front and hind foot.

The development of the sensitive and insensitive structures of the foot.

The position of growth plates and the times of maximum growth and closure of the growth plates.

The structure, function, and composition of:

- Bone
- Muscle
- Joints
- Tendons
- Blood
- Nerves
- Lymphatics
- Cartilage
- Ligaments
- Bursae
- Skin
- Synovial membranes and Fluid
- The hoof and all its associated structures, particularly the hoof wall and laminae.

Candidates must be able to apply theoretical anatomy to the LIVE horse. They must also be able to use anatomical knowledge to solve practical problems - e.g. puncture wounds to the sole.

Candidates should appreciate how veterinary surgeons use their anatomical knowledge of the position of the various nerves to perform nerve blocks, and the significance of these in the diagnosis of lameness. Candidates are NOT required to be able to describe the individual blocks - but should have a broad understanding of this subject.

Radiographic Anatomy and Knowledge. All references to diagnostic imaging include MRI scans, radiographs, and other imaging techniques.

Candidates should be able to prepare a foot for diagnostic imaging, including a laminitic foot. Candidates will be expected to be able to identify all the bones of the limb from the distal radius (tibia) downwards on diagnostic images. AWCF are NOT expected to diagnose complex conditions from diagnostic imaging but should be able to discuss knowledgeably commoner diagnostic imaging abnormalities and identify *gross* pathology.

- Laminitis
- Navicular syndrome
- Side bone
- Ring bone
- Arthritis or DJD
- Spavin
- Dorso palmar imbalance
- Latero medial imbalance
- Pedal bone fractures.
- Periostitis /new bone formation

Candidates should also be able to identify the commoner imaging faults

- Over / under exposure
- Exposed fingers
- Poor positioning
- Incorrect / inadequate labelling

Candidates should be fully conversant with the commoner diagnostic imaging terms used by veterinary radiographers

- Dorso palmar
- Latero medial
- Dorsopalmar lateromedial
- Dorsomedial palmar lateral
- Oblique
- Palmar proximal palmar distal

PHYSIOLOGY.

Both normal and variations from normal.

- Blood supply
- Stay apparatus
- Muscles and tendons
- Response to infection and injury.
- Response to pain.
- Function of the nerves and their interaction with muscles
- The processes involved in degenerative joint disease (DJD).

Foot balance.

- Definition of 'correct' balance.
- Common imbalances and their effects.
- Assessment of correct balance both in the moving and stationary horse.
- Appreciate why good foot balance is important.
- Be able to discuss the effects of certain shoeing practices on foot balance e.g. use of studs
- Possible deleterious effects of traditional practices such as 'couping'.

Recognition of lameness

- Signs
- Predisposing causes
- Common types of injury according to use

Growth abnormalities.

Be able to recognise common growth abnormalities in foals and to give sound advice to other farriers and veterinary surgeons as to how these conditions can best be treated.

- Valgus and varus deformities of the distal radius.
- Other angular deformities (in less detail).
- Ballerina foal syndrome.
- Laxity of the flexor tendons.
- Epiphyseal plate abnormalities.

White Line Disease. (seedy toe)

- Current theories as to potential causes.
- Signs.
- Recognition.
- Treatments and prevention.

Laminitis

- Have a thorough knowledge of the potential causes of laminitis
- The current theories of the causes of laminitis
- The classification of different kinds of laminitis and their prognosis.

Navicular syndrome

- Current Knowledge as to the cause
- Signs and diagnosis (in conjunction with veterinary surgeon)
- Treatments available

Forms of Arthritis / DJD including A & B

(A) Spavin

- Definition
- Potential cause (conformation).
- Signs - how would an affected horse move.

(B) Ring bone (false ringbone and other degenerative joint conditions).

- Definitions.
- Potential causes, e.g. trauma, chronic foot imbalance, inappropriate work.
- Signs, i.e. joint effusion, positive flexion tests, lameness, heat, swelling.

An understanding of the following terms.

- Stringhalt
- Shivering.
- Upward fixation of the patella.
- Dishing.
- Plaiting.

Tendon breakdown.

- Definition.
- Commonly affected tendon overwhelmingly the Superficial Digital Flexor Tendon.
- Breed and type predisposition - i.e. the thoroughbred in training.
- Signs, palmar bowing, heat, pain, dropped fetlock, \pm lameness.
- Why and how tendon breakdown occurs.
- The role of foot balance in tendon disease.

Farriery Knowledge.

Foot balance

Shoeing for different functions - an AWCF should have an extensive repertoire.

- The Racehorse
- Hunters
- Show Jumpers
- Leisure horses & ponies
- Driving horses and ponies
- Draught horses
- Eventers
- Hackneys
- Polo ponies
- Dressage horses
- Harness racing
- Donkeys
- Mules
- Mares at stud

Use of pads and wedges.

Use of protective gear – overreach boots; brushing boots; Yorkshire boots; bandages; knee boots; tendon boots.

Use of modern materials

Sound knowledge of corrective shoeing especially for the following conditions:

- Laminitis in all its forms.
- Hoof cracks
- Arthritic conditions.
- Seedy toe / white line disease
- Spavin.
- Damaged / broken down tendons.
- White Line disease.
- Keratoma.
- Developmental disorders
- Any other abnormality of gait.
- Fractures of the pedal bone.
- Post operative hospital plate shoes e.g. street nail procedure
- Brushing, speedy cutting, over reaching, and forging.
- Sheared heels and all foot imbalances
- Stumbling – including consideration of medical problems and veterinary involvement.
- Caudal heel pain / navicular syndrome

AWCF candidates should be able to discuss alternate methods of shoeing in particular :-

- Natural balance shoes and foot preparation.
- The pros and cons of natural balance shoeing
- The theoretical basis of natural balance shoeing
- Barefoot management.
- Should be able to discuss the ‘Strasser method’ of foot care and explain why the WCF and FRC have both expressed concern about this practice.

Horse Management.

- Recognition of the common breeds and types of horse.
- Evaluation of the age of a horse by dentition (broad knowledge only).
- Common feeding practices.
- Routine immunisations – particularly tetanus.
- Nutritional additives that may be beneficial for example farrier’s formula, glucosamine and chondroitin sulphate. Calcium : phosphate balance.
- Rules of racing as they affect shoeing.
- Preparation of a foot for JMB measurement.
- Restraint - Correct use of twitch, hood, chifney: when to use sedatives.

THE LAW, HEALTH AND SAFETY AND TRADITIONS AS THEY AFFECT FARRIERY.

- The Farriers Registration Act as amended. The responsibilities that the Act lays upon the Farriers Registration Council and individual Farriers.
- Limitations of corrective farriery - differential between insensitive and sensitive tissues.
- Relationships with other Farriers and veterinary surgeons.
- The role of the WCF.
- Role of FRC.
- A broad knowledge of the history, traditions and current structure of the WCF.
- An appreciation of the role of the AWCF as an ambassador for the trade, and an example of the highest level of craftsmanship.
- The role and responsibilities of an Approved Training Farrier.

Health and Safety.

- Safe working practices, forge management, vehicle maintenance, and protective clothing.
- Knowledge of the COSHH regulations as they apply to farriery.
- An appreciation of risk assessment.

Insurance.

- Employers liability insurance.
- Professional indemnity insurance.
- Knowledge of the common insurance policies held by horse owners and their limitations. Including full insurance, loss of use insurance and mortality only insurance.
- *Preparing a report for an insurance company on a horse requiring corrective farriery, in conjunction with the attending veterinary surgeon.*