### Arizona Academy of Farrier Science Curriculum

The Arizona Academy of Farrier Science program prepares its graduates to be employed in the farrier industry by providing applied and practical educational training in farriery, blacksmithing, anatomy and physiology, horsemanship, welding, business management, and radiography. Upon completion of this program, students will have the theory and practical skills needed to be successful with the certification process of the American Farriers Association (AFA) allowing them to continue their career and education in the industry.

At the Arizona Academy of Farrier Science, our faculty bring real-world experience and advanced expertise in fields like AFA Certified Journeyman Farriers, veterinary sciences, top trainers, reproduction experts, and radiology professionals. These passionate educators are committed to delivering applied, hands-on learning that prepares students for careers in today's evolving farrier industry. From award-winning instructors to recognized leaders in their fields, our faculty are at the heart of what makes Arizona Academy of Farrier Science education exceptional.

#### **Program Outcomes**

- 1. Demonstrate the ability to make safe choices in the management and restraint of the horse.
- 2. Study the anatomy of the horse.
- 3. Identify and assess the trimming requirements of the equine foot.
- 4. Identify lameness in horses.
- 5. Identify faults of gait in horses.
- 6. Perform forge modifications to machine made shoes.
- 7. Produce and apply handmade horseshoes.
- 8. Forge therapeutic and corrective horseshoes for the equine foot.
- 9. Demonstrate brazing and forge welding processes in gas forges.
- 10. Perform basic welding using current industry practices.

- 11. Perform appropriate trimming and shoeing technique for the equine foot.
- 12. Interact professionally with clients and colleagues within the farrier industry.
- 13. Provide farrier customer service and client education.
- 14. Perform basic computer skills utilizing industry appropriate software to create basic records and financial reports.
- 15. Read and interpret radiographs in relation to the equine lower leg and hoof.

Upon successful completion of this program, graduates will receive a certificate in Farrier Science.

#### **Career Outcomes**

The Arizona Academy of Farrier Science has a solid reputation collaborating with employers in the industry. This directly translates into jobs for our graduates.

Opportunities include, but are not limited to:

- Paid Apprenticeships
- Local trimming & shoeing business
- Specialty shoeing
- Therapeutic & corrective shoeing
- Performance horse shoeing
- Working ranches, summer camps, outfitting guides, mounted units, & racing industry

## Section 1

Complete the following:

FAR1200 - Equine Anatomy & Physiology

FAR1300 - Equine Behavior and Horsemanship for Farriers

FAR1301 - Introduction to Horseshoeing

FAR 1302- Intermediate Horseshoeing

FAR1400 - Introduction to Blacksmithing and Shoe Modification

FAR 1401- Farrier Business Models

## Section 2

Complete the following:

FAR1700 - Farrier Welding

FAR1802 - Advanced Corrective and Therapeutic Shoeing

FAR1304 - Theory of Therapeutic Farriery

FAR1800 – Principles of Radiography

FAR1500 - Intermediate Blacksmithing

FAR2000 - Apprenticeship

## **Course Descriptions**

## FAR 1200 Equine Anatomy & Physiology

- 1. Describe the anatomy of the axial skeleton of the horse.
- 2. Describe the anatomy, common disorders, treatments, functions, and strides of the foot.
- 3. Explain the anatomy and formation of the equine hoof, sole and frog and the common disorders and treatments of these parts.
- 4. Describe the anatomy, common disorders, and treatments of the common tendons and ligaments of the lower limbs.
- 5. Describe the conformation, common disorders, and treatments of the hind limb.
- 6. Describe bone, joint and cartilage growth and repair, and the common disorders and treatments related to bone and cartilage.
- 7. Describe how to grade equine lameness.

## FAR1300 - Equine Behavior and Horsemanship for Farriers

- 1. Recognize and interpret equine behavior.
- 2. Describe equine learning theory.
- 3. Demonstrate safe horse handling skills while working on a horse.
- 4. Demonstrate safe horsemanship for shoeing and trimming.

#### FAR 1301 - Introduction to Horseshoeing

- 1. Identify, select, and use proper farrier tools.
- 2. Perform appropriate hoof trimming techniques.
- 3. Apply horseshoeing skills.
- 4. Fit and apply horseshoes to front and hind feet.
- 5. Build horseshoes using flat and concave stock.

## FAR 1400 - Introduction to Blacksmithing

- 1. Identify parts of a horseshoe.
- 2. Build horseshoes from barstock.
- 3. Adjust handmade horseshoes for correct fit.
- 4. Perform finishing of the horseshoe.
- 5. Demonstrate ability to use a forge.
- 6. Demonstrate correct methods of tool making.

# FAR1302 - Intermediate Horseshoeing

- 1. Demonstrate forging handmade therapeutic shoes.
- 2. Demonstrate forge welding methods.
- 3. Demonstrate correct measurements for building selected therapeutic bar shoes.
- 4. Demonstrate hoof acrylics and polymers in horseshoeing.
- 5. Assess selected gait faults and their correction.

#### **FAR 1401 - Farrier Business Models**

- 1. Advertising/Marketing
- 2. Client Relations
- 3. Inventory Management
- 4. Business Expenses/Taxes
- 5. Insurance and Liability Practices

#### FAR1700 - Welding and Cutting Practices for Farriers

- 1. Demonstrate safe shop practices.
- 2. Proper use of oxy-acetylene cutting torch.
- 3. Welding using the oxy-acetylene equipment.

- 4. Perform shielded metal arc welding (SMAW).
- 5. Perform gas metal arc welding (GMAW).
- 6. Use selected shop equipment to complete welding exercises.

### FAR2500 - Continuation of Advanced Corrective and Therapeutic Forging

- 1. Demonstrate advanced forging of handmade therapeutic shoes.
- 2. Demonstrate advanced forge welding methods.
- 3. Demonstrate correct measurements for building selected therapeutic bar shoes.
- 4. Demonstrate hoof acrylics and polymers in horseshoeing.
- 5. Assess selected gait faults and their correction.

### FAR2405 - Theory of Therapeutic Farriery and Radiology

- 1. Explain the anatomical structures of the lower equine limb using models and live horses.
- 2. Identify anatomically correct conformation compared to poor conformation.
- 3. Explain therapeutic, pathological, and surgical shoeing.
- 4. Explain corrective shoeing and gait faults.
- 5. Describe pathologies of lower limbs.
- 6. Demonstrate the use of modern materials for hoof repair on models.
- 7. Interpret Radiographs in order to trim and shoe properly.

#### FAR1800 - Apprenticeship

- 1. Upon successful completion of the Farrier Science Program students will have the option of a paid Apprenticeship.
- 2. Graduates will be placed with Professional and Experienced Farriers in the region where the student calls home.
- 3. The Apprenticeship program is unique to the Arizona Academy of Farrier Science and is a privilege for successful graduates of the program.

4. The apprenticeship is a 4 week paid position. If the Mentor and student decide to engage in a longer mentorship (Beyond 4 Weeks), it becomes a sole relationship between student and mentor with all financials and liabilities to be determined by the outside parties involved.