Farrier Science is primarily a self-employed field; therefore, farriers must be knowledgeable and skilled in all facets of the business. The Farrier Science degree program offers hands-on experience in horsemanship, trimming and shoeing, forging and welding. Instruction in anatomy and physiology, business management, and other aspects of horseshoeing are provided in the classroom. The degree program also offers an in-depth study of therapeutic and pathological shoeing, including the physiology, forging and application of shoes.

Program Objectives

Upon completion of an Associate Degree in Farrier Science students will:

1. Apply knowledge of the anatomy and physiology of the equine limb as it relates to a sound horse according to American Farriers Association (AFA) standards.
2. Perform and defend keg shoe modifications according to AFA standards or veterinary prescription.
3. Identify equine gaits and gait faults according to AFA standards or veterinary prescription.
4. Identify pathological conditions of the equine limb and successfully apply the appropriate therapeutic shoeing technique according to AFA standards or veterinary prescription.

Program Objectives Assessment Plan

All program objectives are measured with multiple tools. The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

<table>
<thead>
<tr>
<th>Program Objective</th>
<th>Measurement Tools</th>
<th>Courses In Which Program Objectives Are Presented and/or Measured</th>
</tr>
</thead>
</table>
| 1. Apply knowledge of the anatomy and physiology of the equine limb as it relates to a sound horse according to American Farrier’s Association (A.F.A.) standards. | • A.F.A. Curriculum Written Tests  
• A.F.A. Curriculum Performance Tests  
• CAT  
• Pre/Post-Test  
• A & P Rubric | • ANSC 151  
• FAS 111  
• FAS 121  
• FAS 112  
• FAS 223  
• FAS 224 |
2. Perform and defend keg shoe modifications according to A.F.A. standards or veterinary prescription.

- A.F.A. Curriculum Written Tests
- A.F.A. Curriculum Performance Tests
- CAT
- Pre/Post-Test
- LAB Practicals

- FAS 121
- FAS 131
- FAS 122
- FAS 132
- FAS 223
- FAS 233
- FAS 224

3. Identify equine gaits and gait faults according to A.F.A. standards or veterinary prescription.

- Lab Practicals
- A.F.A. Curriculum Written Tests
- A.F.A. Curriculum Performance Tests
- CAT
- Pre/Post-Test
- Gaits Rubric

- FAS 111
- FAS 112
- FAS 223
- FAS 224

4. Identify pathological conditions of the equine limb and successfully apply the appropriate therapeutic shoeing technique according to A.F.A. standards or veterinary prescription.

- Lab Practical
- A.F.A. Curriculum Written Tests
- A.F.A. Curriculum Performance Tests
- CAT
- Pre/Post-Test
- Oral Tests

- FAS 223
- FAS 233
- FAS 253
- FAS 224
- FAS 289

**General Education Competencies**

Upon completion of the Associate Degree in Farrier Science and in addition to the above mentioned program objectives:

1. Students will read, write, listen and use verbal skills to organize and communicate information and ideas in personal and group settings (Communication).
2. Students will demonstrate mathematical principles and scientific reasoning by applying appropriate methods to the inquiry process (Mathematical and Scientific Reasoning).
3. Students will identify, evaluate and analyze evidence to guide decision making and communicate his/her beliefs clearly and accurately (Critical Thinking).
General Education Competencies Assessment Plan

General education competencies are measured with multiple tools. The following **Curriculum Map** outlines those measurement tools and courses in which the program objectives are presented and/or measured:

<table>
<thead>
<tr>
<th>General Education Competencies</th>
<th>Measurement Tools</th>
<th>Courses In Which General Education Competencies Are Presented and/or Measured</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Communication</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Present ideas in writing.</td>
<td>FAS 112</td>
<td>ACS 100</td>
</tr>
<tr>
<td>2. Present ideas orally</td>
<td>FAS 112, College Rubrics, CAAP, Writing Rubric, ENG 299</td>
<td>COM 102</td>
</tr>
<tr>
<td>according to standard usage.</td>
<td></td>
<td>CIS 101</td>
</tr>
<tr>
<td>3. Demonstrate application</td>
<td></td>
<td>EN 102</td>
</tr>
<tr>
<td>of information technology.</td>
<td></td>
<td>Lab Science Elective</td>
</tr>
<tr>
<td></td>
<td></td>
<td>FAS 111, 112, 223, 224</td>
</tr>
<tr>
<td><strong>Mathematical and Scientific Reasoning</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Demonstrate mathematical principles.</td>
<td>FAS 112, College Rubrics, CAAP, Critical Thinking Rubric, ENG 299</td>
<td>Lab Science Elective</td>
</tr>
<tr>
<td>5. Demonstrate scientific reasoning.</td>
<td></td>
<td>FAS 121, 122, 253, 224</td>
</tr>
<tr>
<td>6. Apply scientific methods</td>
<td></td>
<td></td>
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<tr>
<td>to the inquiry process.</td>
<td></td>
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<tr>
<td><strong>Critical Thinking</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Read and analyze complex</td>
<td>FAS 112, College Rubrics, CAAP, Critical Thinking Rubric, ENG 299</td>
<td>ACS 100</td>
</tr>
<tr>
<td>ideas.</td>
<td></td>
<td>Lab Science Elective</td>
</tr>
<tr>
<td>8. Locate, evaluate and apply</td>
<td></td>
<td>Social Sciences/ Humanities Elective</td>
</tr>
<tr>
<td>research information.</td>
<td></td>
<td>FAS 233, 289</td>
</tr>
<tr>
<td>9. Evaluate and present</td>
<td></td>
<td></td>
</tr>
<tr>
<td>well-reasoned arguments.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Overview**

The Farrier Science assessment program is based upon the Professional Farrier’s Association certification program and is designed to assess trimming and shoeing skills. In addition to testing these “hands-on” aspects of competency, the program includes written examinations designed to test comprehension of equine anatomy, physiology,
and biomechanics. The test also includes sections requiring scientific reasoning skills, application of knowledge, and communication skills.

The Farrier Science assessment plan is addressed via the plan→do→study→adjust cycle that begins every fall term and follows one Farrier Science cohort from first term through graduation.