

Equine Science

Exam Information	Description																
<p>Exam number 127</p> <p>Items 51</p> <p>Points 55</p>	<p>The Equine Science industry certification exam assesses learners on equine science principles, including the history of the horse, anatomy, nutrition, diseases, pests, and overall health. The exam evaluates the scientific processes of observation, measurement, hypothesizing, data gathering, interpretation, analysis, and application. It also covers career opportunities and educational preparation. Assessment includes varied learning activities, with classroom, laboratory, and field experiences emphasized.</p>																
<p>Prerequisites None</p> <p>Recommended course length One semester</p> <p>National Career Cluster Agriculture, Food, & Natural Resources</p> <p>Performance standards Included (Optional)</p> <p>Certificate available Yes</p>	<p>Exam Blueprint</p> <table border="1"> <thead> <tr> <th data-bbox="537 911 678 947">Standard</th> <th data-bbox="1198 911 1503 947">Percentage of exam</th> </tr> </thead> <tbody> <tr> <td data-bbox="537 953 1040 1016">1. Student Organizations in Agricultural Education</td> <td data-bbox="1198 989 1243 1016">2%</td> </tr> <tr> <td data-bbox="537 1022 1049 1085">2. Agricultural Experience in Agricultural Education</td> <td data-bbox="1198 1058 1243 1085">2%</td> </tr> <tr> <td data-bbox="537 1092 984 1119">3. History and Horse Development</td> <td data-bbox="1198 1092 1256 1119">31%</td> </tr> <tr> <td data-bbox="537 1125 987 1152">4. Equine Anatomy and Physiology</td> <td data-bbox="1198 1125 1256 1152">31%</td> </tr> <tr> <td data-bbox="537 1159 1117 1186">5. Equine Nutrition and Feeding Management</td> <td data-bbox="1198 1159 1256 1186">18%</td> </tr> <tr> <td data-bbox="537 1192 932 1220">6. Equine Health Management</td> <td data-bbox="1198 1192 1256 1220">16%</td> </tr> <tr> <td data-bbox="537 1226 727 1253">7. Horse Tack</td> <td data-bbox="1198 1226 1243 1253">0%</td> </tr> </tbody> </table>	Standard	Percentage of exam	1. Student Organizations in Agricultural Education	2%	2. Agricultural Experience in Agricultural Education	2%	3. History and Horse Development	31%	4. Equine Anatomy and Physiology	31%	5. Equine Nutrition and Feeding Management	18%	6. Equine Health Management	16%	7. Horse Tack	0%
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Standard 1

Student will participate in personal and leadership development activities through the FFA.

Objective 1 Student will use communication skills to effectively communicate with others.

1. Understand when it is appropriate to listen and to speak.
2. Understand and follow verbal and written instructions for classroom and laboratory activities.
3. Will practice communication skills through public speaking using one or more of the following activities: memorized speech, prepared speech, extemporaneous speech, parliamentary practice, group presentation, or serving in a leadership capacity.

Objective 2 Student will effectively use teamwork to respectfully work with others

1. Identify and understand different roles in working with a team.
2. Lead a group discussion or serve in a leadership capacity.

Objective 3 Student will use critical thinking and problem-solving skills.

1. Analyze the cause of the problem.
2. Develop a solution to address the problem.
3. Implement the plan.
4. Evaluate the effectiveness of the plan.

Objective 4 Student will be dependable, reliable, steady, trustworthy, and consistent in performance and behavior.

1. Set and meet goals on attendance and punctuality.
2. Prioritize, plan, and manage work to complete assignments and projects on time

Objective 5 Student will be accountable for results.

1. Use an achievement chart for activities and behaviors in class that encourages a personal evaluation of classroom performance.
2. Use reflection to describe what was learned, what went well, what could have been improved, and what are the implications to the learning process.
3. Track and communicate progress toward completion of assignments and projects.

Objective 6 Be familiar with the legal requirements and expectations of the course.

1. Be familiar with the course disclosure statement and all requirements for successful completion of the course.
2. Demonstrate workplace ethics, e.g., fair, honest, disciplined.

Standard 1 Performance Evaluation included below (Optional)

Standard 2

Student will participate in work-based learning activities through the Supervised Agricultural Experience (SAE) Program.

Objective 1 Student will demonstrate employability skills.

1. Use a career search network to find career choices.
2. Identify the appropriate CTE Pathway for the selected career choice.
3. Prepare for entry into the workforce by completing one of the following: a list of required skills needed for a career choice, a resume including a list of demonstrated skills, a cover letter or letter of application, a job application, or participate in an actual or simulated job interview.

Objective 2 Student will participate in a work-based learning experience outside the classroom.

1. Student will plan and implement a Supervised Agricultural Experience Program:
2. Foundational SAE: Career exploration and planning, employability skills for college and career readiness, personal financial management and planning, workplace safety, and agricultural literacy.
3. Immersion SAE: Ownership/entrepreneurship, placement/internship, research, school-based enterprise, and/or service-learning experiences.

Objective 3 Student will develop a job portfolio specific to their selected SAE/WBL experience.

1. Student will keep a personal record/journal/log of their SAE/WBL experience; including pictures, financial records, or log of their hours, skills learned, goals, reflection, etc.

Standard 2 Performance Evaluation included below (Optional)

Standard 3

Students will understand the history of the modern horse and the development of horse breeds, types, and classes

Objective 1 Students will describe the development of the modern horse.

1. Students will discuss the domestication of the horse.
2. Students will identify historical trends in human utilization of horses.
3. Students will describe the current horse industry.

Objective 1 Student will classify horses by breed, type, and class.

1. Students will list and describe equine breeds and their origins.
2. Students will classify and describe equine as a pony, light, draft, and long-eared.
3. Students will describe the gait and movement of horses.

Standard 3 Performance Evaluation included below (Optional)

Standard 4

Students will analyze equine anatomy and physiology.

Objective 1 Students will identify the external parts of the horse.

Objective 2 Students will explore equine bodily systems.

Objective 3 Students will describe the skeletal and muscular systems of the horse

Objective 4 Students will describe the digestive system of the horse.

Objective 5 Students will describe the reproductive systems of the horse.

Standard 4 Performance Evaluation included below (Optional)

Standard 5

Students will learn about equine nutrition and feeding management.

Objective 1 Students will identify feeds important to horses and discuss their nutrient value.

Objective 2 Students will balance an equine ration.

Objective 3 Students will list and describe equine nutritional disorders.

Standard 5 Performance Evaluation included below (Optional)

Standard 6

Students will explore concepts in equine health management.

Objective 1 Students will list, identify, and describe equine diseases.

Objective 2 Students will identify horse internal and external parasites.

Objective 3 Students will properly care for hooves and explain hoof anatomy.

Objective 4 Students will determine proper horse health management practices.

1. Vaccination program
2. Teeth floating
3. Sanitation

Standard 6 Performance Evaluation included below (Optional)

Standard 7 (optional)

Students will properly identify horse tack and individual parts on the tack.

Objective 1 Students will be able to identify saddles by type. Example: general purpose, dressage, jumping, hunting, youth, western, side, racing, etc

Objective 2 Students will be able to identify the parts of a saddle and saddle attachments. Example: pommel, seat, cantle, flaps, billets, stirrup leathers, stirrups, cinch or girth strap, breastplate, etc.

Objective 3 Students will be able to identify horse headgear by type. Example: halter, bridle, hackamore, etc.

Objective 4 Students will be able to identify the parts of specific headgear and headgear attachments. Example: headpiece, cheekpiece, throatlatch, browband, noseband, bit, reins, buckles, leads, bosal, etc.

Standard 7 Performance Evaluation included below (Optional)

Equine Science

Performance assessments may be completed and evaluated at any time during the course. The following performance skills are to be used in connection with the associated standards and exam. To pass the performance standard the student must attain a performance standard average of 8 or higher on the rating scale. Students may be encouraged to repeat the objectives until they average 8 or higher.

Student's Name: _____

Class: _____

Performance standards rating scale



Standard 1 – Student Organizations in Agricultural Education

Score:

- Will practice communication skills through public speaking using one or more of the following activities: memorized speech, prepared speech, impromptu speech, parliamentary practice, group presentation, or serving in a leadership capacity.

Standard 2 – Agricultural Experience in Agricultural Education

Score:

- Student will keep a personal record/journal/log of their SAE/WBL experience; including pictures, financial records or log of their hours, skills learned, goals, reflection, etc.

Standard 3 – History and Horse Development

Score:

- Correctly classify specific equine breeds.
- Correctly identify equine breeds

Standard 4 – Equine Anatomy and Physiology

Score:

- Identify the external parts of a horse.

Standard 5 – Equine Nutrition and Feeding Management

Score:

- Develop a balanced equine ration.

Standard 6 – Equine Health Management

Score:

- Identify symptoms of equine diseases and parasites.

Performance standard average score:

Evaluator Name: _____

Evaluator Title: _____

Evaluator Signature: _____

Date: _____