

## Horse Science

**Course Description:** Horse science is designed to develop basic understanding of equine handling, health, maintenance, reproduction, selection and management. Horse populations in the state have continued to grow and their economic impact has increased with this growth. This course is designed to help students prepare for the social and economic impact equine science will have in the 21st century.

**Recommended Prerequisites:** Agriscience (HQ) and/or Principles of Agricultural Sciences

**Recommended Credit:** 1

**Recommended Grade Levels:** 10<sup>th</sup>, 11<sup>th</sup> or 12<sup>th</sup>

**Course Codes:** (2009-2010) A10 – 5118 or A12 – 5168  
(2010-2015) A12 – 5168

## Horse Science

### Standard 1.0

Explain the history and classification of equine.

### Standard 2.0

Describe major breeds of horses.

### Standard 3.0

Justify the need of personal and occupational safety with equine.

### Standard 4.0

Explain digestion and proper nutrition in horses.

### Standard 5.0

Evaluate the importance of proper health management in horses.

### Standard 6.0

Discuss the importance of proper hoof care.

### Standard 7.0

Evaluate the breeding program in order to develop desirable genetic traits.

### Standard 8.0

Evaluate the factors in selecting a horse for a particular use.

### Standard 9.0

Describe means and techniques for stabling and training a horse.

### Standard 10.0

Integrate academic competencies with competencies in horse science.

### Standard 11.0

Develop premier leadership and personal growth needed for success in horse science.

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### **Standard 1.0**

#### **Explain the history and classification of equine.**

Learning Expectations and Performance Indicators:

- 1.1 Summarize terminology associated with the equine industry.
- 1.2 Explain the history of equine species.
- 1.3 Classify horses by size, type, and use.
- 1.4 Describe the importance of the horse industry in Tennessee and the United States.
- 1.5 Explore career opportunities in the equine industry.

### **Standard 2.0**

#### **Evaluate the major breeds of horses.**

Learning Expectations and Performance Indicators:

- 2.1 Identify and explain the major breeds of horses and their uses.
- 2.2 Analyze the characteristics that should be seen in various breeds of horses.

### **Standard 3.0**

#### **Justify the need of personal and occupational safety with equine.**

Learning Expectations and Performance Indicators:

- 3.1 Summarize safety procedures for handling and transporting horses.
- 3.2 Summarize techniques used for handling and grooming horses.
- 3.3 Demonstrate the proper selection, use and maintenance of personal protective equipment, including tack.
- 3.4 Analyze the health requirements and certificates needed for interstate travel.

### **Standard 4.0**

#### **Explain digestion and proper nutrition in horses.**

Learning Expectations and Performance Indicators:

- 4.1 Analyze parts of the digestive system.
- 4.2 Explain characteristics of feed stuffs.
- 4.3 Balance rations needed for horses during different stages of development.
- 4.4 Identify health problems associated with improper feeding practices.

### **Standard 5.0**

#### **Evaluate the importance of proper health management in horses.**

Learning Expectations and Performance Indicators:

- 5.1 Distinguish between signs of proper health and poor health.
- 5.2 Identify common diseases and parasites, symptoms, and treatment of each.
- 5.3 Analyze practices in an equine health program.
- 5.4 Demonstrate the administration of medications, vaccinations, and proper first aid for equine.
- 5.5 Evaluate the impact of proper tooth and hoof care for horses.

### **Standard 6.0**

#### **Discuss the importance of proper hoof care.**

Learning Expectations and Performance Indicators:

- 6.1 Diagram external and internal parts of the horse hoof.
- 6.2 Examine and explain proper hoof care techniques, including trimming and shoeing.
- 6.3 Evaluate and explain methods of detecting the sources of lameness and suggest possible treatments.

### **Standard 7.0**

#### **Evaluate the breeding program in order to develop desirable genetic traits.**

Learning Expectations and Performance Indicators:

- 7.1 Evaluate the functions of the parts of male and female reproductive systems.
- 7.2 Describe the care and management of breeding animals.
- 7.3 Evaluate different methods used for breeding horses.
- 7.4 Explain the phases of reproductive development from puberty to lactation.

### **Standard 8.0**

#### **Evaluate the factors in selecting a horse for a particular use.**

Learning Expectations and Performance Indicators:

- 8.1 Evaluate and explain the functions of the different parts of the horse.
- 8.2 Identify proper gaits and causes of defects in movement.
- 8.3 Describe factors to consider in judging halter and performance classes.
- 8.4 Orally justify a placing class of horses.

### **Standard 9.0**

#### **Describe means and techniques for stabling and training a horse.**

Learning Expectations and Performance Indicators:

- 9.1 Evaluate methods of stable management.
- 9.2 Evaluate methods of halter and saddle breaking a horse.
- 9.3 Evaluate methods of training a horse for various uses.
- 9.4 Analyze types of physical facilities and equipment.

## **Standard 10.0**

### **Integrate academic competencies with competencies in horse science.**

Learning Expectations and Performance Indicators:

- 10.1 Present research on eliminating disease and unhealthy conditions in a horse herd.
- 10.2 Construct and use spreadsheets and databases to keep records on costs and health factors.
- 10.3 Present research on current issues facing the horse industry.
- 10.4 Use current technology to assimilate information on horse science.
- 10.5 Use correct grammar in presenting oral and written presentations on horse science.
- 10.6 Use ratios to determine proper feeding requirements.
- 10.7 Convert from English to metric units of weight, volume and measurement.
- 10.8 Read and construct graphs, on growth and nutrient intake during the year.
- 10.9 Examine an animal's physiology and determine the functions of different systems.
- 10.10 Utilize the scientific method for solving health and nutritional problems.
- 10.11 Use nomenclature classification to group animals according to use.

## **Standard 11.0**

### **Demonstrate premier leadership and personal growth needed for success in horse science.**

Learning Expectations and Performance Indicators:

- 11.1 Plan an SAEP, supervised agricultural experience program, related to horse science.
- 11.2 Develop skills necessary to participate in horse-related events in the FFA.
- 11.3 Prepare for award programs available in the FFA.