# Equine Science Course No. 18104 Credit: 1.0

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| --- | --- | --- | --- |
| **Student name:** |  | **Graduation Date:** |  |

Pathways and CIP Codes:Animal Science (01.0901)

Course Description:

Directions:The following competencies are required for full approval of this course. Check the appropriate number to indicate the level of competency reached for learner evaluation.

**RATING SCALE:**

4. Exemplary Achievement: Student possesses outstanding knowledge, skills or professional attitude.

3. Proficient Achievement:Student demonstrates good knowledge, skills or professional attitude. Requires limited supervision.

2. Limited Achievement:Student demonstrates fragmented knowledge, skills or professional attitude. Requires close supervision.

1. Inadequate Achievement:Student lacks knowledge, skills or professional attitude.

0. No Instruction/Training:Student has not received instruction or training in this area.

## Benchmark 1: Equine Orientation and Career Exploration

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 1.1 | Discuss the history of the equine |  |
| 1.2 | Examine the growth and decline of the horse industry |  |
| 1.3 | Compare the various uses of equine |  |
| 1.4 | Identify career opportunities in equine industry |  |

## Benchmark 2: Anatomy and Physiology

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 2.1 | Identify and label the surface anatomy |  |
| 2.2 | Name and explain functions of the major organs of the thoracic, abdominal, and pelvic cavities |  |
| 2.3 | Identify and label the skeletal system |  |
| 2.4 | Identify and label the muscular system |  |
| 2.5 | Determine the age of a horse by using the equines teeth |  |
| 2.6 | Understand the importance of dental maintenance |  |

## Benchmark 3: Equine Nutrition

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 3.1 | Define and describe food nutrients |  |
| 3.2 | Formulate and balance rations |  |
| 3.3 | Classify feedstuffs according to their nutritional content |  |
| 3.4 | Identify nutritional deficiencies |  |
| 3.5 | Determine a least cost ration based on local prices |  |
| 3.6 | Identify feeding management recommendations for various production levels |  |

## Benchmark 4: Diseases and Parasites

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 4.1 | Identify the major symptoms and treatments for major internal and external parasites |  |
| 4.2 | Demonstrate how to determine parasite infestation by performing fecal exam |  |
| 4.3 | List the major diseases, their symptoms, prevention, and treatment |  |
| 4.4 | Prescribe preventative measures for major parasites and diseases |  |
| 4.5 | Demonstrate vaccination procedures |  |

## Benchmark 5: Health

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 5.1 | Describe the signs of good health in a horse |  |
| 5.2 | Understand basic first aid for horses |  |
| 5.3 | Relate body condition to health |  |
| 5.4 | Measure horse vital signs |  |
| 5.5 | Evaluate a horses height and weight |  |
| 5.6 | List causes of colic |  |
| 5.7 | Identify symptoms and treatment methods for colic |  |
| 5.8 | Understand the procedure and purpose of castration |  |
| 5.9 | Label the parts of the hoof |  |
| 5.10 | Discuss the care of the hoof and importance of shoeing |  |

## Benchmark 6: Reproduction

### Competencies

| **#** | **DESCRIPTION** | **RATING** |
| --- | --- | --- |
| 6.1 | Recognize the importance of genetics in the improvement of horses |  |
| 6.2 | Label the parts of male/female reproductive systems |  |
| 6.3 | Explain the function of parts in reproductive systems |  |
| 6.4 | Explain the estrous cycle |  |
| 6.5 | Identify the signs of standing heat |  |
| 6.6 | Explain sex determination at fertilization |  |
| 6.7 | Discuss sex-linked characters, crossing over and mutation |  |
| 6.8 | Describe the collecting of semen |  |
| 6.9 | Outline the process used in artificial insemination |  |
| 6.10 | Explain the advantages of using embryo transfers |  |
| 6.11 | Identify proper pregnant mare and foal care |  |

## Benchmark 7: Horse Breeds and Selection

### Competencies

| **#** | **Description** | **RATING** |
| --- | --- | --- |
| 7.1 | Identify major breeds of horses |  |
| 7.2 | Recognize various coat colors and markings |  |
| 7.3 | Analyze pedigrees |  |
| 7.4 | Explain the process of registering a horse |  |
| 7.5 | List factors to consider in selecting horses for specific purposes |  |
| 7.6 | Describe desirable characteristics of a horse for specific purposes |  |
| 7.7 | Distinguish between blemishes and unsoundness |  |

## Benchmark 8: Equitation/Training

### Competencies

| **#** | **Description** | **RATING** |
| --- | --- | --- |
| 8.1 | Demonstrate grooming of horses |  |
| 8.2 | Identify the two main styles of equitation and equipment required |  |
| 8.3 | Demonstrate saddling/bridling/haltering a horse |  |
| 8.4 | Identify different equine behaviors |  |
| 8.5 | Differentiate between various training aids |  |
| 8.6 | Describe the impacts of positive and negative reinforcement |  |

## Benchmark 9: Management of an equine facility

### Competencies

| **#** | **Description** | **Rating** |
| --- | --- | --- |
| 9.1 | Determine labor requirements |  |
| 9.2 | Create a record keeping system for an equine operation |  |
| 9.3 | Understand pasture/stable management |  |
| 9.4 | Analyze equine safety issues |  |
| 9.5 | Determine the use of buildings and fencing |  |
| 9.6 | Accurately record cost analysis |  |
| 9.7 | Create a bill of sale |  |
| 9.8 | List and describe various horse enterprises |  |
| 9.9 | Describe the importance of insurance for horses and riders |  |

I certify that the student has received training in the areas indicated.

Instructor Signature:

For more information, contact:

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