# Equine Science Course No. 18104 Credit: 1.0

|  |  |  |  |
| --- | --- | --- | --- |
| **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:

CTE Pathways Help Desk

(785) 296-4908

pathwayshelpdesk@ksde.org



900 S.W. Jackson Street, Suite 102

Topeka, Kansas 66612-1212

[https://www.ksde.org](https://www.ksde.org/)

The Kansas State Department of Education does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities and provides equal access to any group officially affiliated with the Boy Scouts of America and other designated youth groups. The following person has been designated to handle inquiries regarding the nondiscrimination policies: KSDE General Counsel, Office of General Counsel, KSDE, Landon State Office Building, 900 S.W. Jackson, Suite 102, Topeka, KS 66612, (785) 296-3201.