

Western Technical College

10006123 Animal Health

Course Outcome Summary

Course Information

Description	Students will gain knowledge of the immune system, reproductive system and biosecurity issues. Current trends in reproductive techniques, disease prevention and nutritional management will be discussed.
Career Cluster	Agriculture, Food and Natural Resources
Instructional Level	Associate Degree Courses
Total Credits	3
Total Hours	72

Textbooks

No textbook required.

Program Outcomes

1. Interact as a professional in Agribusiness
2. Investigate opportunities in Agribusiness
3. Apply relevant technologies
4. Develop an Agribusiness Management plan
5. Create a Livestock Management plan

Course Competencies

1. **Perform a health exam that includes the measuring of vital signs of a healthy animal.**

Assessment Strategies

- 1.1. Demonstration

2. **Analyze the effect of pathogens in relation to animal health.**

Assessment Strategies

- 2.1. Report
- 2.2. Written Product
- 2.3. Written Objective Test

Criteria

You will know you are successful when:

- 2.1. Works Cited page is formatted correctly according to [MLA] documentation style
- 2.2. Learner organizes a table outlining common bacterial pathogens affecting their species of interest
- 2.3. Learner organizes a table outlining common viral pathogens affecting their species of interest
- 2.4. Learner organizes a table outlining common fungal pathogens affecting their species of interest
- 2.5. Learner identifies common parasites affecting their species of interest
- 2.6. Learner creates a parasite control plan for external and internal parasites
- 2.7. Learner identifies the characteristics and common transmission and prevention of viral pathogens
- 2.8. Learner identifies the characteristics and common transmission and prevention of bacterial pathogens
- 2.9. Learner identifies the characteristics and common transmission and prevention of fungal pathogens
- 2.10. Learner identifies the characteristics and common transmission and prevention of protozoan pathogens

Learning Objectives

- 2.a. Identify types of pathogen: viral, bacterial, parasitic, and fungal.
- 2.b. Examine the types of pathogens that cause disease to the nervous system.
- 2.c. Examine the types of pathogens that cause disease to the skeletal system.
- 2.d. Examine the types of pathogens that cause disease to the muscular system.
- 2.e. Examine the types of pathogens that cause disease to the digestive system.
- 2.f. Examine the types of pathogens that cause disease to the respiratory system.
- 2.g. Explore benefits of certain pathogens.
- 2.h. Examine methods to prevent diseases related to pathogens.

3. Examine the components of the Immune System.

Assessment Strategies

- 3.1. Written Objective Test

Criteria

You will know you are successful when

- 3.1. you identify the different types of immune antibodies: specific and non specific.
- 3.2. you explain the role of the Lymphatic system in immunity.
- 3.3. you identify the different types of stress on an animal: physical, emotional and social.
- 3.4. you explain the effect of chronic and acute stress on the production of immune antibodies.

Learning Objectives

- 3.a. Identify those components that are necessary for a healthy immune system.
- 3.b. Identify the organelles responsible for developing immune responses
- 3.c. Explore how an animals immune system responds to disease, stress and vaccines.

4. Explore the interaction between nutrition, animal husbandry and housing on the overall health of the animal.

Assessment Strategies

- 4.1. Research Paper

Criteria

- 4.1. Student can recognize how facilities can influence animal health; footing, ventilation, space
- 4.2. Student can identify the most common nutritional causes of illness in an animal

5. Examine the digestive, reproductive, respiratory, circulatory, mammary, and nervous systems and review the clinical signs of disease as related to these systems.

Assessment Strategies

- 5.1. Scenario Response

Criteria

You will know you are successful when

- 5.1. Student can identify and use proper terminology to describe symptoms of digestive system
- 5.2. Student can identify and use proper terminology to describe symptoms of circulatory system
- 5.3. Student can identify and use proper terminology to describe symptoms of nervous system
- 5.4. Student can identify and use proper terminology to describe symptoms of mammary system

6. Investigate the prevention and treatment of internal and external parasites.

Assessment Strategies

6.1. Research Paper

Criteria

- 6.1. Student can identify the economically damaging internal and external parasites of their species
- 6.2. Student can prepare a comprehensive plan to reduce the economic impact of external parasites.
- 6.3. Student can prepare a comprehensive plan to reduce the economic impact of internal parasites.

7. Examine the role of biosecurity in maintaining herd health

Assessment Strategies

7.1. Research Paper

Criteria

- 7.1. Student can identify the components of an internal and external biosecurity plan.
- 7.2. Student develops a biosecurity plan to reduce the transfer of disease within the herd (internally)
- 7.3. Student develops a biosecurity plan to reduce the transfer of disease into the herd (externally)

8. Design an animal welfare plan, as it relates to common management practices.

Assessment Strategies

8.1. Research Paper

Criteria

- 8.1. Student defines management practices as they relate to the welfare of the animal
- 8.2. Student researches and develops an animal management plan that addresses the welfare of the animal.