

Lassen Community College Course Outline

AGR 12 Animal Health and Disease

3.0 Units

I. Catalog Description

Study of common livestock diseases and fundamentals of immunity; includes the livestock technician's role in promoting animal health and the foundation of disease control programs. This course has been approved for hybrid delivery.

Diversity Statement: Our commitment to diversity requires that we strive to eliminate barriers to equity and that we act deliberately to create a safe and inclusive environment where individual and group differences are valued and leveraged for the growth and understanding as an educational community.

Recommended Preparation: Successful completion of ENGL105 or equivalent multiple measures placement.

Transfer Status: CSU/UC

34 hours Lecture, 51 hours Laboratory, 68 Out of Class Hours, 153 Total Hours of Instruction

Scheduled: Spring (even)

II. Coding Information

Repeatability: Not repeatable, take one time

Grading Option: Graded only

Credit Type: Credit - Degree Applicable/Credit

TOP Code: 010200

III. Course Objectives

A. Course Student Learning Outcomes

Upon completion of this course the student will be able to:

1. Identify common diseases, determine treatment, and evaluate environmental factors that contributed to the spread of disease

B. Course Objectives

Upon completion of this course the student will be able to:

1. Describe the importance of promoting livestock health
2. Identify career opportunities in the animal health industry
3. Demonstrate and understand the role animal behavior plays in individual and herd health.
4. Identify the cultural influences that have led to animal health advancements.
5. Identify common diseases and determine appropriate treatment regimen.
6. Differentiate between pathogenic and non-pathogenic disease.
7. Identify environmental factors contributing to disease.

8. Appraise and identify physiological changes which alter susceptibility to various health problems.
9. Name and demonstrate proper use of equipment that humanely confines, treats or protects livestock.
10. Explain basic principles of biosecurity, including disease prevention programs.
11. List regulations of transport for health.
12. Analyze an operational scenario and formulate a preventative program.
13. Have reasonable accommodations made to perform all learning objectives regardless of physical and/or learning disabilities.
14. List common diseases in U.S. livestock production and established control programs.

IV. Course Content

A. Introduction and overview

1. Historical concepts
2. Causative agents of disease
3. Methods of transmission
4. Principles of prevention of disease
 - a. Disinfection
 - b. Vaccinations
 - c. Sanitation
5. Body defense mechanisms
 - a. Primary Immune System
 - b. Secondary Immune System
6. Immunity – classified
7. Predisposing disease factors
8. Disease Treatment
 - a. Proper wound dressing
 - b. Antibiotics

B. Anatomy and Physiology

1. Body system and primary system disease
 - a. Endocrine
 - b. Reproductive
 - c. Digestive
 - d. Circulatory
 - e. Urinary
 - f. Respiratory

C. Parasites

1. Symptoms, lifecycles and controls
 - a. Enteroparasites
 - b. Ectoparasites

D. Restraint

1. Restraint types
 - a. Passive restraint
 - b. Active restraint
 - c.

V. Laboratory Activities:

Individual Laboratory Activities may include but are not limited to:

1. Students will visually inspect the equine, beef, sheep and swine barns for sanitation threats.
2. Documentation of all sanitation problems and corrective guidelines.
3. Disease diagnosis and prescribe treatment.
4. Clean and dress minor wounds
5. Bacteria culture and antibiotic plate testing.
6. Animal system anatomy and physiology.

VI. Assignments

A. Appropriate Readings

Journal of Animal Science and the Merck manual

B. Writing Assignments

All students must write a final paper for the class on an animal health topic.

C. Expected Outside Assignments

Students must do two reports on current animal health concerns as it relates to zoonotic diseases. Students will be required to complete two hours of outside-of-class homework for each hour of lecture.

D. Specific Assignments that Demonstrate Critical Thinking

Students will demonstrate critical thinking by analyzing animal health situations and giving proper treatment.

VI. Methods of Evaluation

Traditional Classroom Evaluation

Student grades will be determined by test, quizzes and by practical diagnosis in lab.

Hybrid Evaluation

Quizzes and exams could be administered in person and/ or online. Students will be expected to complete online assignments and activities equivalent to in class assignments and activities for the online portion of the course. Electronic communication, both synchronous and asynchronous (chat/forum) will be evaluated for participation and to maintain effective communication between instructor and students.

VII. Methods of Delivery

Check those delivery methods for which, this course has been separately approved by the Curriculum/Academic Standards Committee.

- | | |
|---|--|
| <input checked="" type="checkbox"/> Traditional Classroom | <input type="checkbox"/> Correspondence Delivery |
| <input checked="" type="checkbox"/> Hybrid Delivery | <input type="checkbox"/> Online Delivery |

Traditional Classroom Delivery

Lecture, Demonstrations, discussion, audio/visual aids, group exercises, guest speakers, lab, individualized programs and other as needed.

Hybrid Delivery

Hybrid modality may involve face to face instruction mixed with online instruction. A minimum of 1/3 of instruction, including 100% labs, will be provided face to face. The remaining hours will be taught online through a technology platform as adopted by the district.

VIII. Representative Texts and Supplies

Constable, Peter; *Veterinary Medicine*, 11th edition, 2017, Elsevier, ISBN 9780702052460

IX. Discipline/s Assignment

Agriculture Production

X. Course Status

Current Status: Active

Original Approval Date: 12/02/2014

Board Approval Date: 01/13/2015

Chancellor's Office Approval Date: 03/26/2015

Revised By: Brian Wolf

Curriculum/Academic Standards Committee Revision Date: 12/5/2023

Revised for IPR, no change: 03/15/2022