

**EQSCI 52 Course Outline as of Spring 2012****CATALOG INFORMATION**

Dept and Nbr: EQSCI 52 Title: EQUINE HEALTH

Full Title: Equine Health

Last Reviewed: 2/12/2018

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	3.00	Lecture Scheduled	2.00	17.5	Lecture Scheduled	35.00
Minimum	3.00	Lab Scheduled	3.00	8	Lab Scheduled	52.50
		Contact DHR	0		Contact DHR	0
		Contact Total	5.00		Contact Total	87.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 70.00

Total Student Learning Hours: 157.50

Title 5 Category: AA Degree Applicable

Grading: Grade or P/NP

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly: AG 69

**Catalog Description:**

Course introduces the diseases and lameness associated with the musculoskeletal system, as well as diseases of the respiratory, digestive, neurological, reproductive and other major organ systems of the horse. Emphasis is on preventive maintenance and necessary managerial practices needed to keep the equine athlete, broodmare or family horse in good health.

**Prerequisites/Corequisites:****Recommended Preparation:**

Eligibility for ENGL 100 or ESL 100

**Limits on Enrollment:****Schedule of Classes Information:**

Description: Course introduces the diseases and lameness associated with the musculoskeletal system, as well as diseases of the respiratory, digestive, neurological, reproductive and other major organ systems of the horse. Emphasis is on preventive maintenance and necessary managerial practices needed to keep the equine athlete, broodmare or family horse in good health. (Grade or P/NP)

Prerequisites/Corequisites:

Recommended: Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Transfer Credit: CSU;

Repeatability: Two Repeats if Grade was D, F, NC, or NP

## **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

<b>AS Degree:</b>	<b>Area</b>	Effective:	Inactive:
<b>CSU GE:</b>	<b>Transfer Area</b>	Effective:	Inactive:
<b>IGETC:</b>	<b>Transfer Area</b>	Effective:	Inactive:
<b>CSU Transfer:</b>	Transferable	Effective: Fall 1988	Inactive: Fall 2024
<b>UC Transfer:</b>		Effective:	Inactive:

**CID:**

**Certificate/Major Applicable:**

Both Certificate and Major Applicable

## **COURSE CONTENT**

**Outcomes and Objectives:**

Upon completion of the course, students will be able to:

1. Describe the general anatomy of the equine.
2. Identify, describe, and recognize infectious and non-infectious diseases, their clinical signs treatment options and prognosis.
3. Identify and describe common environmental factors that may cause health problems.
4. Identify and describe common internal and external parasites and describe the symptoms they produce.
5. Describe parasite control through management and anthelmintics.
6. Develop effective worming and vaccination schedules.
7. Identify and describe the factors that can cause colic in the equine and describe the prognosis associated with each factor.
8. Identify and describe the various types of wounds in the equine and describe how to effectively manage each type.
9. Describe the pathogenesis of Navicular Disease and the related foot problems that are differentials and identify and describe common methods of treatment.
10. Identify and describe major types of fore and hind limb lameness and indicate how they relate to usability.
11. Identify and describe the major factors responsible for laminitis and outline methods for its prevention and treatment.
12. Identify and describe the common reproductive health abnormalities of the mare and the stallion.
13. Identify and describe normal foaling behavior and presentation, and outline procedures for the proper care of the neonate.

**Topics and Scope:**

- I. Introduction to Health and Disease Prevention
  - A. General Anatomy
  - B. General Physical Exam
  - C. Routine health maintenance care
  - D. Restraint
- II. The Sick Horse
  - A. Febrile
  - B. Afebrile
- III. Equine Infectious Diseases
  - A. Viral
    - 1. Influenza
    - 2. Rhinopneumonitis
    - 3. Viral Arteritis
    - 4. Encephalomyelitis
    - 5. Rabies
    - 6. Equine Infectious Anemia
    - 7. West Nile
  - B. Bacterial
    - 1. Strangles
    - 2. Pigeon Fever
    - 3. Foal Pneumonia
    - 4. Potomac Horse Fever
    - 5. Contagious Equine Metritis
    - 6. Tetanus
    - 7. Salmonellosis
  - C. Protozoal--Equine Protozoal Myeloencephalitis
  - D. Tick Borne Diseases
    - 1. Lyme Disease
    - 2. Equine Ehrlichiosis
    - 3. Equine Piroplasmiasis
    - 4. Tularemia
    - 5. Spotted Fever
    - 6. Tick Paralysis
    - 7. Equine Granulocytic Anaplasmosis
    - 8. Heart Water
- IV. Noninfectious Diseases
  - A. Equine Exertional Rhabdomyolysis
  - B. Cushings
  - C. Hives
  - D. Heaves
  - E. Photosensitivity
- V. Toxicology
  - A. Heavy Metal
    - 1. Arsenic
    - 2. Lead
    - 3. Selenium
  - B. Man-made Poisons
    - 1. Rodenticide
    - 2. Herbicide
    - 3. Insecticide/Pesticide
    - 4. Monensin/Rumensin
    - 5. Urea

- C. Phytotoxins
  - 1. Cardiac Affecters
  - 2. Hepatic Affecters
  - 3. Neural Affecters
- D. Mycotoxins
- E. Zootoxins
  - 1. Snakebite
  - 2. Spiderbite
  - 3. Blister Beetle bite
- VI. Equine Parasites
  - A. Internal
    - 1. Strongyles
    - 2. Ascarids
    - 3. Gastrophyllus
    - 4. Anoplocephala
    - 5. Oxyuris
    - 6. Dictyocaulus
  - B. External
    - 1. Ticks
    - 2. Flies
    - 3. Mites
    - 4. Mosquitoes
    - 5. Lice
    - 6. Fungal
  - C. Parasite Control
    - 1. Products
    - 2. Schedules
- VII. Non-Obstructive Colic
  - A. Flatulent/Spasmodic
  - B. Sand
  - C. Pregnancy Associated
- VIII. Obstructive Colic
  - A. Impaction
    - 1. Enterolith
    - 2. Parasite
    - 3. Foreign body
  - C. Congenital
    - 1. Meckel's Diverticulum
    - 2. Atresia
    - 3. Lethal White in Paints
  - D. Thromboembolism
  - E. Herniation
  - F. Colon Torsion
  - G. Neoplasia
  - H. Volvulus
  - I. Lipomy
  - J. Rectal Prolapse
- VIII. Wounds and Wound Management
  - A. Types of Wounds
    - 1. Open
    - 2. Closed
    - 3. Burns

- B. Wound Management
  - 1. Cold hosing
  - 2. Bandages
  - 3. Massage
  - 4. Astringents
  - 5. Poulticing
  - 6. Fomentations
  - 7. Tubbing
  - 8. Pressure bandages
  - 9. Shockwave therapy
- C. Tissue Repair
  - 1. Inflammatory
  - 2. Debridement
  - 3. Maturation
- D. Factors Affecting Healing
  - 1. Patient Condition
  - 2. Movement
  - 3. Infection
  - 4. Drugs
  - 5. Trauma
- E. Primary Closure
- F. Delayed Closure
- G. First Aid Kits
- X. Lameness
  - A. Foreleg Lameness
    - 1. Ringbone
    - 2. Sidebone (quittor)
    - 3. Osslets
    - 4. Epiphysitis
    - 5. Bucked Shins
    - 6. Tendonitis
  - B. Rear Leg Lameness
    - 1. Pelvic
    - 2. Patellar (Stifle)
    - 3. Osteochondritis Dessecans (OCD)
    - 4. Tarsal (Hock) Spavin
    - 5. Stringhalt
    - 6. Fibro/Ossifying Myopathy
    - 7. Azoturia/Myositis
- XI. Navicular Disease
  - A. Possible Causes
    - 1. Conformational
    - 2. Genetic
    - 3. Environmental
    - 4. Nutritional
    - 5. Occupational
  - B. Diagnosis
    - 1. Physical Signs
    - 2. History
    - 3. Radiographs
  - C. Treatment
    - 1. Drug Modalities

2. Shoeing
3. Nerving
4. Pasture Rest

## XII. Laminitis

### A. Causes

1. Endotoxemia
2. Infectious/Chemical
3. Mechanical

### B. Diagnosis

1. Acute vs. Chronic
2. Rotation vs. Sinkers
3. Radiographs

### C. Treatment

1. Drugs
2. Mechanical

### D. Prognosis

## XIII. Stallion and Mare Management

### A. Infertility in the Mare

1. Vaginitis
2. Cervicitis
3. Metritis
4. Developmental Abnormalities

### B. Infertility in the Stallion

1. Psychological Causes
2. Physical

## XIV. Foaling

### A. Management

1. Indications
2. Dystocia
3. Retained Fetal Membranes

### B. Care of the Neonate

1. Umbilical Care
2. Colostrum Intake
3. Meconium Passage

## Assignment:

1. Reading assignments averaging 30 pages per week.
2. Writing assignments to include brief reports, worksheets, and written essay exams.
3. 3-5 quizzes, 1-2 midterms and a final
4. Term paper of 5 to 7 pages
5. Class presentation on a disease
6. Practical skills demonstration
7. Performance exam (lab practical)

## Methods of Evaluation/Basis of Grade:

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Written homework, lab reports, short essay, research paper

Writing  
20 - 30%

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Homework problems, worksheets

Problem solving  
10 - 20%

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Practical skills demonstration, performance exam

Skill Demonstrations  
10 - 20%

**Exams:** All forms of formal testing, other than skill performance exams.

Quizzes, midterms, final: multiple choice, true/false, matching, completion, essay

Exams  
30 - 40%

**Other:** Includes any assessment tools that do not logically fit into the above categories.

Participation, group presentation

Other Category  
10 - 10%

### **Representative Textbooks and Materials:**

Equine Science, 2nd edition. Parker, Rick. Delmar Publishers, 2002 (Classic)

Illustrated Atlas of Clinical Equine Anatomy and Common Disorders of the Horse, Vols. 1 & 2., by Riegel, Ronald. J. and Hakola, Susan. Equistar Publications, 2003 (Classic)