

Discipline: Agriculture	Sub-discipline: Equine Science
General Course Title: Equine Health	Min. Units: 3 Semester
Proposed Suffix:	
<p>Course 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.</p>	
Required Prerequisites or Co-Requisites ¹	
Advisories/Recommended Preparation ²	
<p>Course Objectives: <i>At the conclusion of this course, the student should be able to:</i></p> <ul style="list-style-type: none"> • Describe the general anatomy of the equine. • Identify and describe common dental problems and abnormalities of the equine. • Age an equine by dental eruption and dentition. • Identify, describe, and recognize infectious and non- infectious diseases, their clinical signs, treatment options and prognosis. • Identify and describe common environmental factors that may cause health problems. • Identify and describe common internal and external parasites and describe the symptoms they produce. • Describe parasite control through management and anthelmintics. • Develop effective worming and vaccination schedules. • Identify and describe the factors that can cause colic in the equine and describe the prognosis associated with each factor. • Identify and describe the various types of wounds in the equine, and describe how to effectively manage each type. • Describe the pathogenesis of Navicular Disease and the related foot problems that are differentials and identify and describe common methods of treatment. • Identify and describe major types of fore and hind limb lameness and indicate how they relate to usability. • Identify and describe the major factors responsible for laminitis and outline methods for its prevention and treatment. • Identify and describe the normal reproductive patterns of the mare and the stallion. • Identify and describe normal foaling behavior and presentation, and outline procedures for the proper care of the neonate. 	
<p>Course Content:</p> <ol style="list-style-type: none"> 1. Introduction to Health and Disease Prevention <ol style="list-style-type: none"> A. General Anatomy B. Age by Dentition C. Dental Problems and Abnormalities <p>Equine Health (Content Continued)</p> <ol style="list-style-type: none"> 2. The Sick Horse <ol style="list-style-type: none"> A. Febrile <ol style="list-style-type: none"> 1. Viral 	

¹ Prerequisite or co-requisite course need to be validated at the CCC level in accordance with Title 5 regulations; co-requisites for CCCs are the linked courses that must be taken at the same time as the primary or target course.

² Advisories or recommended preparation will not require validation but are recommendations to be considered by the student prior to enrolling.

- 2. Bacterial
- 3. Anhydrous/Dehydration
- B. Afebrile
 - 1. Choke
 - 2. Dental
 - 3. Feed/Water Abnormalities
 - 4. Colic
- 3. Common Equine Infectious Diseases
 - A. Viral
 - 1. Influenza
 - 2. Rhinopneumonitis
 - 3. Viral Arteritis
 - 4. Encephalomyelitis
 - 5. Rabies
 - 6. Equine Infectious Anemia
 - B. Bacterial
 - 1. Streptococcus Equi
 - 2. Rhodococcus (Corynebacterium) Equi
 - 3. C. Pseudo tuberculosis (Pigeon Breast)
- 4. Equine Toxicology and Exotic Diseases
 - A. Heavy Metals
 - 1. Arsenic
 - 2. Lead
 - 3. Selenium
 - B. Man-made Poisons
 - 1. Rodenticide
 - 2. Herbicide
 - 3. Insecticide/Pesticide
 - C. Toxic Plants
 - 1. Cardiac Affecters
 - 2. Hepatic Affecters
 - D. Miscellaneous
 - 1. Monensin/Rumensin
 - 2. Snakebite
 - 3. Blister Beetle
 - 4. Mycotoxicoses
 - E. "Exotic" New Diseases
 - 1. C.E.M.
 - 2. Lymes
 - 3. Potomac Fever

**Equine Health
(Content Continued)**

- 5. Equine Parasites
 - A. Internal
 - 1. Strongyles (Blood worms)
 - 2. Ascarids (Roundworms)
 - 3. Gastrophilus (Bots)

- 4. Anoplocephala (Tapeworms)
 - 5. Oxyuris (Pinworms)
 - B. External
 - 1. Ear Ticks
 - 2. Fly Dermatitis
 - 3. Mange
 - 4. Ringworm (Dermatophytosis)
 - C. Worming Schedules
6. Non-Obstructive Colic
- A. Acute Diarrhea
 - 1. Salmonella
 - 2. Colitis-X
 - 3. Other Toxemias
 - B. Endoparasites
 - C. Sand
 - D. Pregnancy Associates
 - E. Flatulent/Spasmodic
7. Obstructive Colic
- A. Impaction
 - B. Enterolith/Foreign Body
 - C. Congenital
 - 1. Meckel's Diverticulum
 - 2. Atresia
 - 3. Lethal White in Paints
 - D. Thromboembolism
 - E. Herniation
 - F. Colon Torsion
 - G. Intussusception
 - H. Volvulus
 - I. Lipomy
 - J. Rectal Prolapse
 - L. Neoplasia

Equine Health
(Content Continued)

8. Wounds and Their Management
- A. Types of Wounds
 - 1. Open
 - 2. Closed
 - 3. Burns
 - B. Tissue Repair
 - 1. Inflammatory
 - 2. Debridement
 - 3. Repair
 - 4. Maturation
 - C. Factors Affecting Healing
 - 1. Patient Condition

- 2. Movement
- 3. Infection
- 4. Drugs
- 5. Trauma
- D. Primary Closure
- E. Delayed Closure
- F. Open Wound Management

9. Navicular Disease (Sore Heal Syndrome)

- 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

Equine Health (Content Continued)

10. 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. Fibrotic/Ossifying Myopathy
 - 7. Azoturia/Myositis

11. Laminitis

- A. Causes
 - 1. Endotoxemia
 - 2. Infectious/Chemical
 - 3. Mechanical
- B. Diagnosis
 - 1. Acute vs. Chronic
 - 2. Rotation vs. Sinkers

<ul style="list-style-type: none"> 3. Radiographs C. Treatment <ul style="list-style-type: none"> 1. Drugs 2. Mechanical D. Prognosis 	
<p>12. Stallion and Mare Management</p> <ul style="list-style-type: none"> A. Infertility in the Mare <ul style="list-style-type: none"> 1. Vaginitis 2. Cervicitis 3. Metritis 4. Developmental Abnormalities B. Infertility in the Stallion <ul style="list-style-type: none"> 1. Psychological Causes 2. Physical 	
<p>13. Foaling</p> <ul style="list-style-type: none"> A. Management <ul style="list-style-type: none"> 1. Indications 2. Dystocia/Complications B. Care of the Neonate <ul style="list-style-type: none"> 1. Umbilical Care 2. Colostrum Intake 3. Meconium Passage 	
<p>Laboratory Activities: Individual Laboratory Activities are designed to support course objectives.</p>	
<p>Methods of Evaluation: Lecture Comprehensive Quizzes and Exams Written Critical Thinking Scenarios Problem Analysis and Solution Research and Term Papers</p>	<p>Methods of Evaluation: Laboratory Laboratory Skill Validation by Observation Laboratory Projects and Reports Laboratory Research Projects and Reports Laboratory Skill Practicum Exams</p>
<p>Typical Textbooks, Manuals, or Other Support Materials</p> <p style="padding-left: 40px;"><u>Equine Science</u>, 2nd edition. Parker, Rick. Delmar Publishers, 2002.</p> <p style="padding-left: 40px;"><u>Illustrated Atlas of Clinical Equine Anatomy and Common Disorders of the Horse</u>, Vols. I & II. Riegel, Ronald. J. and Hakola, Susan. Equistar Publications, 2003.</p>	
<p>Statewide Articulation: CPP-AVS 365/L, other universities as lower division elective.</p>	
<p>FDRG Lead Signature:</p>	<p>Date:</p>
<p>Mark E. Bender, PhD CSU Stanislaus</p>	
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