I. **OVERVIEW**
The following information will appear in the 2012 - 2013 catalog

ANSC 207  *Equine Science*  3 Units

A survey of the equine industry: selection, feeding, breeding, facilities, handling, and health management will be emphasized to ensure scientifically-based management decisions.

Field trips might be required.  (A-F Only) Lecture /Lab  
**Transfer:** (CSU, UC)

II. **LEARNING CONTEXT**
*Given the following learning context, the student who satisfactorily completes this course should be able to achieve the goals specified in Section III, Desired Learning:*

A. **COURSE CONTENT**

1. **Required Content:**

   a. History and development of the horse industry
      i. Evolution and domestication of the horse
      ii. Historical and cultural uses
      iii. Economic importance

   b. Horse breeds and classes
      i. Origin and adaptation
      ii. Classes
      iii. Major uses

   c. Equine selection
      i. Functional anatomy
      ii. Selection
      iii. Evaluation of unsoundness
      iv. Vices

   d. Breeding and reproduction
      i. Stallion management
      ii. The mare
      iii. Gestation
iv. Foal management

e. Feeding and nutrition
   i. Digestion and utilization of feed
   ii. Nutrient requirements
   iii. Pasture management

f. Disease and parasites
   i. Common equine health problems
   ii. Parasite control
   iii. Health programs

g. Equine facilities and equipment
   i. Ranch layout
   ii. Facilities
   iii. Equipment and identification

h. Basic horsemanship
   i. Finances of keeping a horse
   ii. Ground safety
   iii. Basic horse handling

2. **Required Lab Content:**

a. Demonstration of grooming, handling and leading a horse
   i. Basic knot tying
   ii. Identification of grooming equipment including use for each tool
   iii. Demonstration of proper haltering and safe rope handling when leading

b. Demonstration of ground safety techniques for horses
   i. Catching and releasing horses
   ii. Proper and improper places to stand while holding a horse

c. Identification of various feed items
   i. Grasses and legumes
   ii. Grain products
iii. Vitamin & mineral supplements

iv. Speciality supplements

3. **Recommended Content:**

   a. Observation of equine industry events

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### HOURS AND UNITS

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### METHODS OF INSTRUCTION (TYPICAL)

*Instructors of the course might conduct the course using the following method:*

1. Lecture/discussions.
2. Use of PowerPoint, films to supplement lectures, filmstrips, videotapes, and problem-solving.
3. Discussion periods related to class demonstrations.
4. Assign writing assignments emphasizing descriptive, analytical, and evaluative skills.

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### ASSIGNMENTS (TYPICAL)

1. **EVIDENCE OF APPROPRIATE WORKLOAD FOR COURSE UNITS**

   *Time spent on coursework in addition to hours of instruction (lecture hours)*

   a. Daily reading of texts
   b. Preparation for weekly quizzes
   c. Weekly internet research to complete assignments
   d. Weekly assignments relating to course outline
   e. Periodic reports

2. **EVIDENCE OF CRITICAL THINKING**

   *Assignments require the appropriate level of critical thinking*

   a. Choose a breed that you have never heard of and research it.
      i. Give a ten-minute report for the class on that breed include the following details: origin, use, typical size, characteristics, world numbers.

   b. Typical assignment: Conformation Assignment
      i. Relate form to function and explain the following with at least one complete paragraph per question:
a. Advantages and disadvantages to shoulder angle
b. The length of a horse’s back as it relates to appearance and riding use
c. The correct placement of legs under the body
d. Way of traveling as it affects "wear and tear"
e. Appearance vs. productivity

ii. Give a short description of a conformationally correct horse for a given discipline. Example: Jumping horses should have short backs and be cow hocked...

iii. Extra Credit: Describe your (a) horse’s conformational qualities and tell why they are an advantage or disadvantage to him/her.
   a. Include pictures
   b. Breed description
   c. Ideal conformation for your horse's breed

c. Typical exam question: Which is the oldest living ancestor of the horse?
   i. Eohippus
   ii. Przewalski’s Horse
   iii. Zebras
   iv. Arabian horses

d. Typical exam question: The definition of a bay horse is which of the following?
   i. Any variation of brown including those with pigmented skin
   ii. Tan, brown, reddish brown body w/ a black mane and tail
   iii. "Plain brown wrapper"
   iv. The most common color of a horse

e. Typical exam question: The oldest known ancestor of the horse is:
   i. Eohippus
   ii. Mesohippus
   iii. Pilocene Epoch
   iv. Merychippus

E. TEXTS AND OTHER READINGS (TYPICAL)

III. **DESIRED LEARNING**

A. **COURSE GOAL**
   As a result of satisfactory completion of this course, the student should be prepared to:

   identify equine breeds, evolution, selection and breeding, nutrition and general management practices in the equine industry.

B. **STUDENT LEARNING GOALS**
   Mastery of the following learning goals will enable the student to achieve the overall course goal.

1. **Required Learning Goals**
   Upon satisfactory completion of this course, the student will be able to:

   a. Explain the evolution and domestication of the horse as it pertains to the modern horse industry.

   b. Describe a disease and parasite prevention program for equines based on knowledge of geographical, seasonal and age factors.

   c. Design equine handling facilities and explain basic housing requirements.

   d. Describe safety techniques in addition to demonstrating ground safety around horses.

   e. Explain the unique adaptations of the equine’s digestive system and describe a sound feeding program that is modified to best fit the digestive adaptations.

   f. Demonstrate knowledge of equine reproduction as it pertains to sound management.

   g. Design equine handling facilities and explain basic housing requirements for horses in the local region.

   h. Identify basic grooming practices, including tools, techniques and benefits of grooming.

2. **Lab Learning Goals**
   Upon satisfactory completion of the lab portion of this course, the student will be able to:

   a. Demonstrate basic grooming practices including tool identification.

   b. Demonstrate basic ground safety around horses, including leading.

IV. **METHODS OF ASSESSMENT (TYPICAL)**

A. **FORMATIVE ASSESSMENT**
   1. Class discussion and participation in lecture material
   2. Laboratory participation and skills demonstration and evaluation
   3. Quizzes-weekly assessment of lecture material
   4. Breed Project
   5. Facilities Project
   6. Exams-Midterm (objective and essay).

B. **SUMMATIVE ASSESSMENT**
1. Final exam including comprehensive evaluation
2. Lab Practical including skills evaluation