

**EQSCI 162 Course Outline as of Fall 2010****CATALOG INFORMATION**

Dept and Nbr: EQSCI 162 Title: HORSE HOUSING/FACILITIES

Full Title: Horse Housing and Facilities

Last Reviewed: 4/12/2010

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	1.00	Lecture Scheduled	1.00	17.5	Lecture Scheduled	17.50
Minimum	1.00	Lab Scheduled	0.50	6	Lab Scheduled	8.75
		Contact DHR	0		Contact DHR	0
		Contact Total	1.50		Contact Total	26.25
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 35.00

Total Student Learning Hours: 61.25

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:

**Catalog Description:**

Discussion of planning, design and layout of horse stables and facilities. Various types of materials and styles are reviewed. Barns, corrals, fencing and stable equipment for small or large horse ranches will be examined, including location, permitting, costs and environmental considerations.

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

Eligibility for ENGL 100 or ESL 100

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

Description: Discussion of planning, design and layout of horse stables and facilities. Various types of materials and styles are reviewed. Barns, corrals, fencing and stable equipment for small or large horse ranches will be examined, including location, permitting, costs and environmental considerations. (Grade or P/NP)

Prerequisites/Corequisites:

Recommended: Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Transfer Credit:

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:
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<b>CSU Transfer:</b>	Effective:	Inactive:
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<b>UC Transfer:</b>	Effective:	Inactive:
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**CID:**

**Certificate/Major Applicable:**

Both Certificate and Major Applicable

## **COURSE CONTENT**

### **Outcomes and Objectives:**

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

1. Discuss welfare and environmental concerns related to equine facilities development and design.
2. Identify common materials used in fencing.
3. Identify barn styles, equipment and hardware.
4. Compare arena styles, sizes, and footing.
5. Analyze governmental agriculture construction codes and permits.
6. Evaluate economic factors associated with equine facilities development.
7. Assess common facilities in Sonoma County.
8. Determine appropriate construction materials for equine facilities based upon intended use.

### **Topics and Scope:**

1. Animal welfare
    - a. Physical considerations
      - i. Temperature
      - ii. Air quality
      - iii. Stall space
    - iv. Flooring
    - v. Feed and water
  - b. Social / Behavior
    - i. Horse to horse interaction
    - ii. Flight animal
    - iii. Potential for vices
  - c. Sanitation considerations
2. Regulations
  - a. County building codes for equine facilities.

- b. Environmental.
- 3. Climate considerations
- 4. Workflow considerations
- 5. Site characteristics
- 6. Horse barns and stables
  - a. Intended use or purpose
  - b. Barn construction styles and relative costs
  - c. Architectural design
    - i. Regional
    - ii. Shape and function
    - iii. Roof types
  - d. Barn function
    - i. Stall size
    - ii. Feed storage
    - iii. Tack and equipment storage
    - iv. Breeding accommodations
    - v. Grooming and saddling
    - vi. Wash area
    - vii. Floors
    - viii. Rolling equipment storage
    - ix. Details and hardware
    - x. Feeders
    - xi. Waterers
    - xii. Manure and bedding disposal
- 7. Fencing
  - a. Considerations
    - i. Purpose
    - ii. Visibility
    - iii. Strength and security
    - iv. Safety
    - v. Appearance
  - b. Posts
  - c. Pasture fence types
  - d. Wood rail
  - e. Specialties
  - f. Electric
  - g. Corral/paddock fencing
  - h. Gates
- 8. Pasture shelters
  - a. Purpose
  - b. Construction
    - i. Floor/Base
    - ii. Walls
    - iii. Roof
    - iv. Location
- 9. Arenas
  - a. Purpose
  - b. Size
  - c. Fencing
  - d. Footing
  - e. Indoor
  - f. Drainage

10. Round Pens
  - a. Purpose
  - b. Styles
  - c. Size
  - d. Geometry of materials needed
  - e. Footing
11. Equipment
  - a. Waterers
  - b. Troughs
  - c. Hitching rails
  - d. Hitching posts
  - e. Trail gates
  - f. Stall feeders
  - g. Pasture feeders
  - h. Wash racks
  - i. Palpation chutes
  - j. Vet chutes
  - k. Harrow
  - l. Carts
  - m. Trailers
  - n. Emergency prep

### **Assignment:**

1. Suggested reading will be taken from periodicals and text; average 15 pages a week.
2. Worksheets, class notes, field work notes, and study guides will be the basis for problem solving assignments.
3. Facility design project paper
4. Final exam
5. Presentation of project papers
6. Field trip to equine facilities

### **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.

None, This is a degree applicable course but assessment tools based on writing are not included because problem solving assessments and skill demonstrations are more appropriate for this course.

Writing  
0 - 0%

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

Project paper, field work

Problem solving  
30 - 40%

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

Presentation of project paper, field work

Skill Demonstrations  
30 - 40%

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

Final Exam: Multiple choice, true/false, matching items, completion

Exams  
30 - 40%

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

Attendance and participation

Other Category  
0 - 10%

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

Horse Housing, Klemish and Hill, Trafalgar Square Publishing 2002

Horse Facilities Handbook (MWPS-60), Midwest Plan Service, Iowa State Univ., Ames Iowa 2005

Horse Barns Big & Small 3rd Ed., Ambrosiano & Harcourt, Breakthrough Publications 2006

Roofs and Rails, Gavin Ehringer, Western Horseman Books. 1995

High Tensile Wire Fencing, Northeast Regional Agricultural Engineering Services. 2002

Stablekeeping, Klemish and Hill, Storey Publishing 2000

Horsekeeping on a Small Acreage, Cherry Hill, Storey Publishing 2005

Fences for Pasture & Garden, Gail Damerow, Gardenway Publishing, 1992 (Classic)