**ANSCI 26 Course Outline as of Fall 2005**

# CATALOG INFORMATION

Dept and Nbr: ANSCI 26 Title: LIVESTK EVALUATION
Full Title: Livestock Evaluation
Last Reviewed: 3/9/2015

| 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 | 17.5 | 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

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| Title 5 Category: | AA Degree Applicable |
| Grading: | Grade Only |
| Repeatability: | 39 - Total 2 Times |
| Also Listed As: | |
| Formerly: | AG 26 |

**Catalog Description:**
Detailed analysis of various visual and physical methods of appraising beef, sheep, swine and horses concerning functional and economic value. Written and oral summaries of evaluation will be learned. Specific reference will be made to performance data and factors determining carcass value.

**Prerequisites/Corequisites:**

**Recommended Preparation:**
Eligibility for ENGL 100 or ESL 100

**Limits on Enrollment:**

**Schedule of Classes Information:**
Description: Detailed analysis of various visual and physical methods of appraising beef, sheep, swine and horses concerning functional and economic value. Written and oral summaries of evaluation will be learned. Specific reference will be made to performance data and factors determining carcass value. (Grade Only)
Prerequisites/Corequisites:

Recommended: Eligibility for ENGL 100 or ESL 100
Limits on Enrollment:
Transfer Credit: CSU;UC.
Repeatability: Total 2 Times

## ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

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|---|---|---|---|---|---|
| **AS Degree:** | **Area** | | | Effective: | Inactive: |
| **CSU GE:** | **Transfer Area** | | | Effective: | Inactive: |
| **IGETC:** | **Transfer Area** | | | Effective: | Inactive: |
| **CSU Transfer:** | Transferable | Effective: | Fall 1981 | Inactive: | Fall 2020 |
| **UC Transfer:** | Transferable | Effective: | Fall 1981 | Inactive: | Fall 2020 |

**CID:**

**Certificate/Major Applicable:**
Certificate Applicable Course

## COURSE CONTENT

**Outcomes and Objectives:**
The student will:
a. Identify common breeds of livestock.
b. Discuss the process of meat animal growth, development and finishing.
c. Demonstrate how to combine "eyeball" or subjective evaluation with objective methods of evaluation (production records, etc.).
d. Define traits needing improvement in a breeding herd.
e. Identify traits most economically important.
f. List traits that cannot be greatly altered through selective breeding.
g. Illustrate an animal's performance potential and select the most efficient animals for marketability.
h. Identify the factors that affect carcass quality and yield grades.
i. Describe and compare animals with proper livestock terminology in both oral and written form.
j. Develop and hone the power of observation and memory.
k. Organize classes of live animals based on economically important traits.
l. Identify external, anatomical features of livestock.
m. Identify anatomical points on the live animal analogous to the areas of the carcass.
n. Discuss the importance of livestock evaluation within various career opportunities.
o. Have reasonable accommodations made to perform all learning objectives regardless of physical and/or learning disabilities.

**Topics and Scope:**

1. Unit One: Introduction to Evaluation

a. Importance to rancher or farmer
b. Importance to the feedlot operator
c. Importance to the meat buyer
d. Importance to 4-H leader and FFA advisor

2. Unit Two: Growth, Development, and Fattening of Meat Animals
   a. What is growth?
   b. The growth curve
   c. Growth and development of bone, fat and muscle
   d. Physiological age
   e. Effects of size or body type and sex on growth
   f. Relative lean-to-fat ratio by species and sex
   g. Criteria used to evaluate growth
3. Unit Three: Livestock Improvement Through Selection
   a. Major factors affecting rate of improvement
      1. Heritability
      2. Accuracy of records
      3. Selection of differential selection systems
      4. Tandem
      5. Independent culling
      6. Selection index
4. Unit Four: Supplement Aids in Livestock Evaluation
   a. Weight
   b. Frame size
   c. Linear measurements
   d. Body type score
   e. Performance testing
   f. Contemporary index or ratios
   g. Backfat probe and ultrasonic instruments
5. Unit Five: Live Market Hog Evaluation
   a. Terms
   b. Percentage carcass muscle
   c. Live hog grading
   d. Pork carcass evaluation
   e. Yield of lean cuts
6. Unit Six: Breeding Swine Evaluation
   a. Skeletal correctness
   b. Size and scale
   c. Capacity
   d. Muscle and leanness
   e. Underlines and sex character
7. Unit Seven: Live Market Cattle Evaluation
   a. Terms
   b. Weights and dressing percentage
   c. Fat thickness
   d. Ribeye area
   e. Quality grades
   f. Yield grades
   g. Market classes and grades of cattle
8. Unit Eight: Evaluation of Beef Cattle Performance Data
   a. Reproductive performance
   b. Mothering ability
   c. Conformation score

9. Unit Nine: Visual Evaluation of Breeding Beef Cattle
   a. Structural correctness
   b. Sex and breed character
   c. Size and scale
   d. Muscle
   e. Capacity and condition
10. Unit Ten: Live Market Lamb Evaluation
   a. Terms
   b. Weights and dressing percentage
   c. Fat thickness
   d. Quality grades
   e. Yield grades
   f. Market classes and grades
   g. Determination of maturity and classes
11. Unit Eleven: Evaluation of Sheep Performance Data
   a. Ewe and lamb index
   b. Growth rate
   c. Wool production
12. Unit Twelve: Visual Evaluation Breeding Sheep
   a. Skeletal correctness
   b. Frame
   c. Capacity
   d. Body composition
   e. Head, neck and shoulders
   f. Breed character and fleece
13. Unit Thirteen: Horse Evaluation
   a. General considerations
   b. Way of going
   c. Quarter-horse type
14. Unit Fourteen: Selection of Feeder Livestock
   a. Feeder pig selection
      1. Grade
      2. Health
      3. Structural soundness and ideal type
   b. Feeder cattle selection
      1. Age and weight
      2. Grades
      3. Frame size
      4. Body condition
   c. Feeder lamb selection
      1. Grades
      2. Body type and weights
15. Unit Fifteen: Scoring System for Keep-Cull Classes

**Assignment:**

Assignments will be taken from periodicals, handouts, and texts.

**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.

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| Lab reports, Essay exams | Writing<br>10 - 30% |

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

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| Quizzes, Exams | Problem solving<br>20 - 30% |

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

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| Class performances, Performance exams | Skill Demonstrations<br>30 - 40% |

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

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| Multiple choice, True/false, Matching items, Completion | Exams<br>30 - 40% |

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

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| None | Other Category<br>0 - 0% |

**Representative Textbooks and Materials:**
LIVESTOCK JUDGING, SELECTION, AND EVALUATION, 3rd Edition, by Hunsley.