ANSCI 26 Course Outline as of Fall 2009

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

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:

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:
Upon completion of the course, students will be able to:
1. Identify common breeds of livestock.
2. Discuss the process of meat animal growth, development and finishing.
3. Demonstrate how to combine "eyeball" or subjective evaluation with objective methods of evaluation (production records, etc.).
4. Define traits needing improvement in a breeding herd.
5. Identify traits most economically important.
6. List traits that cannot be greatly altered through selective breeding.
7. Illustrate an animal's performance potential and select the most efficient animals for marketability.
8. Identify the factors that affect carcass quality and yield grades.
9. Describe and compare animals with proper livestock terminology in both oral and written form.
10. Develop and hone the power of observation and memory.
11. Organize classes of live animals based on economically important traits.
12. Identify external, anatomical features of livestock.
13. Identify anatomical points on the live animal analogous to the areas of the carcass.
14. Discuss the importance of livestock evaluation within various career opportunities.
15. Students repeating this course will complete projects and assignments of increasing difficulty and complexity.

Topics and Scope:

1. Introduction to Evaluation

a. Rancher or farmer
b. Feedlot operator
c. Meat buyer
d. 4-H leader and FFA advisor

2. 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. Livestock Improvement Through Selection Affecting Rate of Improvement
a. Heritability
b. Accuracy of records
c. Selection of differential selection systems
d. Tandem
e. Independent culling
f. Selection index

4. 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. Live Market Hog Evaluation
a. Terms
b. Percentage carcass muscle
c. Live hog grading
d. Pork carcass evaluation
e. Yield of lean cuts

6. Breeding Swine Evaluation
a. Skeletal correctness
b. Size and scale
c. Capacity
d. Muscle and leanness
e. Underlines and sex character

7. 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. Evaluation of Beef Cattle Performance Data
a. Reproductive performance
b. Mothering ability
c. Conformation score

9. 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. 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. Evaluation of Sheep Performance Data
a. Ewe and lamb index
b. Growth rate
c. Wool production

12. 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. Horse Evaluation
a. General considerations
b. Way of going
c. Quarter-horse type

14. 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. Scoring System for Keep-Cull Classes

16. Students repeating this course will complete projects and assignments of increasing difficulty and complexity.

Assignment:

Read periodicals, handouts, and texts (20 to 30 pages per week).
Quizzes, tests, mid-term and final exam.
Completion of 17 lab reports (3 to 5 pages).
Repeating students will expect to complete more complex and difficult assignments and skills.

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.

Lab reports	Writing 10 - 30%

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

None	Problem solving 0 - 0%

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

Class performances, performance exams	Skill Demonstrations 30 - 40%

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

Quizzes, tests, essay exams	Exams 30 - 50%

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:
LIVESTOCK JUDGING, SELECTION, AND EVALUATION, 1992, by R. E. E. Hunsley. (Classic in the field)