

Reedley College
Ralph Loya
Fall, 1999

Office: AG 5
Phone: 638-3641, Ext. 3268
M, W 10:00 a.m. & T, Th 9:00 a.m.

COURSE INFORMATION

COURSE	AG 6 - Livestock Selection & Evaluation
UNITS & HOURS	3 Units. 5 hours per week (2 hours lecture & 3 hours lab)
PREREQUISITES	None
TRANSFER	Transfers to CSU-Fresno, Cal Poly-SLO, and CSU-Chico
CATALOG DESCRIPTION	Detailed analysis of various visual and physical methods of appraising beef, sheep, swine, and horses as related to functional and economic value. Written and oral summaries of evaluation will be learned.
TEXTBOOK	<u>Live Animal Carcass Evaluation & Selection Manual</u>
ADDITIONAL REFERENCES	Livestock breed magazines, Western Livestock Journal, extension/experimental station publications, and sire directories.
ATTENDANCE	<ul style="list-style-type: none">• Attendance is required since most of the learning occurs in a lecture/laboratory situation.• Students are responsible for obtaining notes/information missed due to absence from the instructor.• Please notify the instructor if you know in advance that you will be absent from class.• College policy dictates that an instructor should drop a student with two consecutive weeks of unexcused absences.• At the end of the 9th week of instruction, no withdrawals are permitted and the student must receive a letter grade for the class. The last day to drop a course is Friday, October 15, 1999.
POLICY ON CHEATING & PLAGIARISM	In keeping with the philosophy that students are entitled to the best education available, and in compliance with Board Policy 5410, each student is expected to exert an entirely honest effort toward attaining an education. Violations of this policy will result in disqualification for the course.

GOALS

The goals of the course are to give students a basic understanding of opportunities and skills in the livestock industry. Emphasis will be placed on job entry skills, understanding necessary personal and educational qualifications, as well as employment procedures.

This course will extend the student's knowledge into the areas of performance data sheets/records; relationships between the live animal and its carcass; reproductive efficiency, efficient conversion of feed into meat, wool fiber, or power. Other skills will also include slaughter grades and wholesale cuts of the three livestock species, how to improve/expand power of observation and memory development, how to improve skills in accurately describing and comparing animals, how to improve reasons by using correct and accepted livestock terminology.

OBJECTIVES

Upon completion of the course, students will be able to evaluate and describe livestock's physical make-up and future outcome, read pedigrees and performance data and understand how it relates to conformation type, understand genetic traits and how animals may be improved through selection and breeding, identify breeds of livestock and their ages accurately, and present oral reasons on selection of livestock.

METHODS FOR MEASURING STUDENT ACHIEVEMENT & DETERMINING GRADES

- **Writing Assignments**
Laboratory Reports, Reading Reports, Written Homework
- **Computational Problem-solving**
Homework Problems, Field Work, Exams
- **Skill Demonstrations**
Class Performance, Field Lab Work (25 points/each)
- **Examinations**
Multiple Choice, True/False, Matching, Essay
- **Judging**
Participate in a collegiate livestock judging contest
- **Grades**
Determined through a numerical system, approximately:
A = 90-100%, B = 80-89%, C = 70-79%, D = 60-69%, F = < 59%
- **Tutorial Assistance**
Available on campus (HUM building) upon request.

COURSE CONTENT

- **Introduction to Evaluation**
 1. Importance to rancher or farmer
 2. Importance to the feedlot operator
 3. Importance to the meat buyer
 4. Importance to 4H leader and FFA advisor
- **Growth, Development, and Fattening of Meat Animals**
 1. What is growth?
 2. The growth curve
 3. Growth & development of bone, fat, and muscle
 4. Physiological age
 5. Effects of size or body type and sex on growth
 6. Relative lean-to-fat ratio by species and sex
 7. Criteria used to evaluate growth
- **Livestock Improvement through Selection**
 1. Major factors affecting rate of improvement
 - a. Heritability
 - b. Accuracy of records
 - c. Selection differential
 2. Selection systems
 - a. Tandem
 - b. Independent culling
 - c. Selection index
- **Supplemental Aids in Livestock Evaluation**
 1. Weight
 2. Frame size
 3. Linear measurements
 4. Body type score
 5. Performance testing
 6. Contemporary index or ratios
 7. Backfat probe and ultrasonic instruments
- **Live Market Hog Evaluation**
 1. Terms
 2. Percentage carcass muscle
 3. Live hog grading
 4. Pork carcass evaluation
 5. Yield of lean cuts
- **Breeding Swine Evaluation**
 1. Skeletal correctness
 2. Size and scale
 3. Capacity
 4. Muscle and leanness
 5. Underlines and sex character
- **Live Market Cattle Evaluation**
 1. Terms
 2. Weights and dressing percentage
 3. Fat thickness
 4. Ribeye area
 5. Quality grades
 6. Yield grades
 7. Market classes and grades of cattle

- **Evaluation of Beef Cattle Performance Data**
 1. Reproductive performance
 2. Mothering ability
 3. Conformation score
- **Visual Evaluation of Breeding Beef Cattle**
 1. Structural correctness
 2. Sex and breed character
 3. Size and scale
 4. Muscle
 5. Capacity and condition
- **Live Market Lamb Evaluation**
 1. Terms
 2. Weights and dressing percentage
 3. Fat thickness
 4. Quality grades
 5. Yield grades
 6. Market classes and grades
 7. Determination of maturity and classes
- **Evaluation of Sheep Performance Data**
 1. Ewe and lamb index
 2. Growth rate
 3. Wool production
- **Visual Evaluation Breeding Sheep**
 1. Skeletal correctness
 2. Frame
 3. Capacity
 4. Body composition
 5. Head, neck, and shoulders
 6. Breed character and fleece
- **Horse Evaluation**
 1. General considerations
 2. Way of going
 3. Quarter Horse type
- **Selection of Feeder Livestock**
 1. Feeder pig selection
 - a. Grade
 - b. Health
 - c. Structural soundness and ideal type
 2. Feeder cattle selection
 - a. Age and weight groups
 - b. Grades
 - c. Frame size
 - d. Body condition
 3. Feeder lamb selection
 - a. Grades
 - b. Body types and weights
- **Scoring System for Keep-Cull Classes**