

COURSE OUTLINE

Livestock Selection I

Course Description

AG 133. Livestock Selection I. 3 hours credit. The course will give the student an understanding of the evaluation of livestock including visual appraisal, grading, classification, market types, breeding and selection of livestock.

Course Relevance

This course will open the eyes of students wishing to prepare themselves for a future in livestock production. It will study, in-depth, the understanding of visual evaluation, production records and selection techniques based on operational goals.

Required Materials

Boggs, D., Merkel, R. & Doumit, M. (1998). Livestock and carcasses (5th ed.). Dubuque, IA: Kendall/Hunt Publishing

Learning Outcomes

The intention is for the student to be able to

1. Identify and recognize strengths of all major breeds of livestock
2. Understand feeder livestock grading systems
3. Communicate an understanding of current USDA grading procedures for market animals
4. Calculate quality and yield grades
5. Select livestock appropriate for various operational goals
6. Evaluate livestock on various phenotypic traits

Primary Learning PACT Skills that will be DEVELOPED and/or documented in this course

Through the student's involvement in this course, he/she will develop his/her ability in the following primary PACT skill areas:

1. Critical Thinking
 - The student will develop critical thinking skills through assignments, exams and in class activities.
2. Problem Solving
 - The student will develop the knowledge to make selection decisions on given a variety of different goals and criteria.

Secondary skills (developed but not documented):

Teamwork
Self-Concept
Ethical Conduct

Speaking
Writing
Reading
Listening
Coping with Change

Major Summative Assessment Task(s)

These learning outcomes and the primary Learning PACT skills will be demonstrated by

1. Completion of a writing assignment related to a specific livestock selection decision. (critical thinking)
2. Completion of several exams, quizzes and in-class assignments related to USDA grading systems and understanding of proper visual selection techniques. (problem solving)

Course Content

- I. Themes – Key recurring concepts that run throughout this course:
 - A. Breeds of livestock
 - B. USDA feeder grading
 - C. USDA market livestock grading
 - D. Production records
- II. Issues – Key areas of conflict that must be understood in order to achieve the intended outcome:
 - A. Breed importance and history
 - B. Visual appraisal
 - C. Carcass breakdown
- III. Concepts – Key concepts that must be understood to address the issues:
 - A. Origin/strengths/weaknesses associated with each breed
 - B. Commercial versus purebred mating systems
 - C. Basic animal anatomy
 - D. Terminology related to both visual evaluation and carcass composition
- IV. Skills/Competencies – Actions that are essential to achieve the course outcomes:
 - A. Problem solving
 - B. Reading
 - C. Writing
 - D. Critical thinking
 - E. Application of concepts

Learning Units

- I. Breeds of livestock
 - A. Historical look at the breeds
 - B. Strengths and weaknesses
 - C. Importance to United States agriculture
 - D. Use in purebred and commercial breeding systems
- II. Feeder livestock
 - A. Beef cattle

- B. Swine
- C. Sheep

III. Market livestock

- A. Yield grading
 - 1. Beef
 - 2. Sheep
 - 3. Swine
- B. Quality grading
 - 1. Beef
 - 2. Sheep

IV. Visual evaluation

- A. Breeding livestock
- B. Market animals

Learning Activities

Lecture, instructor-led class discussions, group study, field trips, outdoor live animal evaluation.

Grade Determination

The student will be graded on completion of exams, quizzes, homework and in-class assignments, class participation, and other methods of evaluation at the discretion of the instructor.