

**SOUTHEAST COMMUNITY COLLEGE**  
**COURSE SYLLABUS**  
**TRAN-WELDING-AG**  
**Livestock Management & Production Program**  
**Revision Date: January 2025**

**I. CATALOG DESCRIPTION**

**Course Number:** AGRI 2256

**Course Title** Advanced Beef Cattle Production

**Prerequisite(s):** AGRI2231, AGRI2245

**Catalog Description:** Study of beef cattle and the interrelationship in the beef production chain.

**Credit Hours:** 3.0

**Class Hours:** 30

**Lab Hours:** 45

**Total Contact Hours:** Total of Class + Lab Hours 75

**II. COURSE OBJECTIVES:** *Course will:*

1. Form a concept of management practices involved in beef cattle production and beef industry.
2. Describe fundamentals of cow calf operations
3. Describe fundamentals of stocker/backgrounder operations
4. Describe fundamentals of feedlot operations
5. Describe fundamental concepts of packers, retailers and consumers of beef
6. Consider ramifications of 2 breed rotational and 3 breed rotational-terminal crossbreeding systems, composite breeding systems, full blood and pure-bred systems
7. Increase awareness of nutrient requirements of various classes of beef and the nutrient composition of feedstuffs provided through out the production cycle
8. Outline herd health provisions and health practicums
9. Consider estrus synchrony, AI and ET as applied to repro management of the cow

**III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES:**

**A. STUDENT LEARNING OUTCOMES:** *Student will be able to:*

1. Discuss with proper terminology, classes and breeds of cattle, breeding and marketing systems as they apply to beef production and the beef industry as a whole.
2. Identify nutrient requirements of varying stages of production with regard to classes of cattle and season of production.
3. Design mating of SCC lab beef cowherd, potentially synchronize and AI the herd.
4. Design health planning to properly immunize and parasitize all classes of beef.
5. Form a concept of total management practices involved in beef cattle production and the beef industry.

## **B. GENERAL EDUCATION LEARNING OUTCOMES**

### **GELO #5: Analytical, Quantitative, and Scientific Reasoning**

A primary way of knowing and making sense of our world comes from the analysis of quantitative and scientific information. SCC students will have developed the ability to examine problems or issues by evaluating evidence, analyzing relationships between variables, and developing and communicating conclusions.

#### **Outcomes:**

1. Manipulate formulas, data sets, graphs, tables, etc. in a way to produce a meaningful outcome

## **IV. CONTENT/TOPICAL OUTLINE (*course outline may provide more detailed information*)**

- a. Industry segmentation
- b. Breeds
- c. Breeding Systems
- d. Beef cattle nutrition
- e. Health of cattle
- f. Marketing
- g. Advanced cattle management

## **V. INSTRUCTIONAL MATERIALS**

**A. Suggested Text(s):** Beef Production and Management Decisions, Sixth Edition, ISBN: 978-0-13-460269-1

**B. Other Resources:** calculator, pen, pencils, outer wear for inclement weather

**Outside Reading:** research required: Library, periodical publications, private business research, field trips, and seminars.

## **VI. METHODS OF PRESENTATION/INSTRUCTION**

Methods of presentation typically include a combination of the following:

- a. Presentation methods will include, but are not limited to: slide and video presentation, research and writing assignments, field trips, and guest lectures and speakers.
- b. Laboratory assignments and tasks.

## **VII. METHODS OF EVALUATION**

Methods of evaluation typically include a combination of the following:

- A. Quizzes, tests, and exams
- B. Skills tasks
- C. Research projects- model operation plan
- D. Computer application
- E. Daily evaluation
- F.

## **SCC STANDARD GRADING SCALE POLICY:**

|                  |                   |
|------------------|-------------------|
| <b>A+ 95-100</b> | <b>C+ 75-79</b>   |
| <b>A 90-94</b>   | <b>C 70-74</b>    |
| <b>B+ 85-89</b>  | <b>D+ 65-69</b>   |
| <b>B 80-84</b>   | <b>D 60-64</b>    |
|                  | <b>F Below 60</b> |

**VIII. SPECIFIC COURSE REQUIREMENTS:**

- a. Successful completion of all exams, projects, and assignments
- b. Properly and safely handling livestock and livestock equipment
- c. Utilizing proper safety precautions and cleaning and maintenance of facilities
- d. Proper attire for inclement weather is required. Loose fitting clothing, non-protective footwear, and any clothing that may be deemed as unsafe, offensive, or a distraction from the subject matter will be reason for dismissal from the day's activities.