SOUTHEAST COMMUNITY COLLEGE
COURSE SYLLABUS
TRAN-WELDING-AG
Livestock Management & Production Program
Revision Date: August 2020

I. CATALOG DESCRIPTION

Course Number: **AGRI 1221**
Course Title Livestock Nutrition
Prerequisite(s): AGRI 1141 or instructor permission

Catalog Description: Introduction to animal nutrition and foodstuffs. Feed formulation, feed process, handling sales and service.

Credit Hours: 2.0
Class Hours: 23
Lab Hours: 23
Total Contact Hours: Total of Class + Lab Hours 46

II. COURSE OBJECTIVES: *Course will:*

1. Discuss the six necessary nutrients as they apply to livestock feeds and feeding
2. Explain the body functions related to and affected by nutrients
3. Identify anatomical segments of the GI tracts and explain processes of digestion, absorption, and transport
4. Explain the functions of amino acids, macro and micro minerals, volatile fatty acids, npn, etc. in livestock nutrition
5. Introduce the use of composition and requirement tables and how to follow general procedures to balance livestock rations
6. Utilize computer software to formulate livestock rations
7. Identify the various feed ingredients commonly used in livestock production
8. Evaluate the economics of formulated rations
9. Discuss the processing equipment used in ingredient processing and mixing

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES:

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

1. explain how the six necessary nutrients apply to livestock feeds and feeding
2. assess livestock body functions in relationship to nutrient use
3. identify anatomical segments of the livestock GI tracts
4. explain digestion, absorption, and transport of nutrients in livestock
5. apply the use of basic nutrients to maintain healthy, productive livestock
6. use composition and requirement tables in balancing livestock rations

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) Apply mathematical and scientific methods to solve problems from an array of contexts and everyday situations.

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

1. Nutrients
2. Physiology of Livestock
3. Digestive Systems
4. Effects of Nutrients
5. Introduction of Ration Components and Balancing

V. INSTRUCTIONAL MATERIALS

A. Required Text(s): No text required

B. Other Resources: Pen, paper, calculator, outside reading material as assigned, audio-visual Materials, outerwear for inclement weather

VI. METHODS OF PRESENTATION/INSTRUCTION

Methods of presentation typically include a combination of the following:

A. Presentation methods will include but not be limited to lecture, demonstrations, practice activities, audio/visual materials, and over-the-shoulder supervision.

B. Lab assignments and projects designed to promote effective livestock nutrition skills.

VII. METHODS OF EVALUATION

A. Methods of evaluation typically include a combination of the following:
B. Quizzes, tests, and exams
C. Skills tasks
D. Attendance (More than three unexcused absences will result in the lowering of the term grade one letter grade per unexcused above the three.)
E. Daily participation (No use of tobacco; no use of electronic communication devices)
F. Project

SCC STANDARD GRADING SCALE POLICY:

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

VIII. SPECIFIC COURSE REQUIREMENTS: