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

I. CATALOG DESCRIPTION

Course Number: **AGRI 2223**
Course Title Principles of Livestock Feeding
Prerequisite(s): AGRI1221

Catalog Description: Provides a practical background in feed formulation, feed processing, handling, sales, and service. Includes a basic study of livestock performance and feed trials.

Credit Hours: 4.0
Class Hours: 45
Lab Hours: 45
Total Contact Hours: Total of Class + Lab Hours 90

II. COURSE OBJECTIVES: *Course will:*

1. Explore the analysis of feedstuffs.
2. Construct diets for all aspects of livestock feeding
3. Formulate, mix, label and market commercial feeds.
4. Evaluate record keeping and economics of livestock nutrition.
5. Organize feed trials and analyze results in daily performance.
6. Evaluate growth performance of livestock.
7. Figure and evaluate feeding ratios.
8. Understand the various medications used in livestock feeding.
9. Construct close out data for livestock on feed.

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES:

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

1. Explain how water, crude protein, crude fat, crude fiber, nitrogen free extract, and mineral matter tests are conducted.
2. Formulate and balance rations for classes of swine, sheep, and beef finishing facilities.
3. Observe how commercial feeds are formulated, mixed, labeled, and marketed as well as read feed tags and weigh out micronutrients for ration formulations.
4. Solve operational problems of blending rations typical in the feed room of a feed mill.
5. Understand record keeping and economics of livestock feeding. The student will chart and graph efficiency factors from feed trial results.
6. Evaluate performance of finishing livestock and determine market readiness as well as estimate approximate times of market readiness with regard to consumer acceptance.
7. Select, feed, weigh, and tag livestock for feeding trials. Students will weigh livestock regularly and adjust rations accordingly. The student will grind and mix feed as per their balanced ration

formulation. The student will weigh feed allotments for the livestock in feed trials to obtain data used in performance calculations.

8. Maintain livestock quarters in clean and proper working condition.

B. GENERAL EDUCATION LEARNING OUTCOMES

GELO #3: Critical Thinking & Problem Solving

Critical thinkers have the ability to evaluate a problem or assumption and determine an appropriate course of action. They use reason and evidence to make judgments and decisions. Critical thinking and problem-solving skills rank highly among employer expectations.

Outcomes:

1) Collect, identify, interpret and analyze data.

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

a. Proximate analysis of feedstuffs
b. Calculating and balancing swine, beef, dairy, and swine rations
c. Commercial feeds
d. Feed room blending of feeds
e. Economics and recordkeeping of finishing livestock
f. Performance evaluation of livestock
g. Practical feeding and weighing and feed allotment adjustment for trial livestock
h. Maintenance, repair, and cleaning of facilities

V. INSTRUCTIONAL MATERIALS

A. Required Text(s): None, handouts provided

B. Other Resources: calculator, pen, pencils, outerwear for inclement weather, safety eyewear for all lab activities outside reading and research required: library, 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 show and video presentations, research and writing assignments, field trips, and guest lecturers and speakers.
b. Laboratory assignments and tasks

VII. METHODS OF EVALUATION

A. Methods of evaluation typically include a combination of the following:
B. Quizzes, tests, and exams
C. Skills tasks
D. Research projects
E. Computer application
F. Daily Evaluation

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:

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.