SOUTHEAST COMMUNITY COLLEGE
COURSE SYLLABUS
TRANS-WELDING-AG
Agriculture Management & Production Program
Revision Date: August 2020
Syllabus Statements

I. CATALOG DESCRIPTION

Course Number: AGRI 1131
Course Title Crop and Food Science
Prerequisite(s): None

Catalog Description: Principles and practices of production of major agronomic crops of the high plains.

Credit Hours: 3.0 hours
Class Hours: 45 hours
Lab Hours: 0
Total Contact Hours: Total of Class + Lab Hours 45

II. COURSE OBJECTIVES: *Course will:*

1. The course will demonstrate the process of the growth of various crops.
2. The course will demonstrate the effects of climatic conditions on crop growth.
3. The course will demonstrate the effects of management decisions on crop growth.
4. The course will introduce crop and plant botanical structures.
5. The course will identify critical plant processes as a factor of crop growth.
6. The course will introduce growth stages of agronomic crops.
7. The course will introduce procedures on identifying crop populations.
8. The course will introduce concepts of crop pest management.
9. The course will distinguish characteristics of monocots vs. dicots.

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES:

A. STUDENT LEARNING OUTCOMES:

1. Students shall be able to distinguish and discuss the elements and climatic factors of crop production.
2. Students shall be able to distinguish and discuss the factors that affect cropping decisions.
3. Students shall be able to identify the agronomic processes involved in plant growth and development.
4. Students shall be able to determine plant populations.
5. Students shall identify crop development at critical growth stages.
6. Students shall be able to identify seed, root, stem, leaf, and flower structures.
7. Students shall be able to discuss transpiration, respiration, and photosynthesis.
8. Students will identify methods of crop pest management.
9. Students will distinguish plants and crops that are classified as monocots or dicots.

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) Acquire and integrate knowledge and construct relationships across disciplines.

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

a. Understanding Agronomic and Horticulture Production
b. Agronomic and Horticulture Plants in Relation to the Environment
c. Botany of Agronomic and Horticulture Plants
d. Seeding or Transplanting Rates
e. Corn Production
f. Sorghum Production
g. Soybean Production
h. Small Grain Production
i. Horticulture Crop Production

V. INSTRUCTIONAL MATERIALS

A. Required Text(s): Introductory Crop Science, 7th edition, Richard P. Waldren. (Pearson) ISBN-13:978-1-269-61540-2 OR ISBN-10:1-269-61540-8

B. Other Resources:

Calculator and Notebook

VI. METHODS OF PRESENTATION/INSTRUCTION

A. Methods of presentation typically include a combination of the following:

a. Methods will include, but not limited to:
Lecture, laboratory assignment and tasks, power point and video presentations, research and writing assignments, field trips, and guest lectures and speakers.

b. Lab Activities

VII. METHODS OF EVALUATION

A. Methods of evaluation typically include a combination of the following:
B. Quizzes, tests, and exams
C. Skills project and exam
D. Daily Evaluation
E. Participation

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.