SOUTHEAST COMMUNITY COLLEGE
COURSE SYLLABUS
TRAN-WELDING-AG
Agriculture Management & Production Program
Revision Date: August 2025

I. CATALOG DESCRIPTION

Course Number: **AGRI 1261**
Course Title Advanced Precision Technology
Co-requisite(s): AGRI 1161

Catalog Description: The class focuses on the integration of cutting-edge technologies, data analysis, and management techniques to optimize agricultural practices. The course goes beyond traditional methods and delves into the use of advanced tools to enhance efficiency, sustainability, and productivity in farming.

Credit Hours: 2.0
Class Hours: 23
Lab Hours: 23
Total Contact Hours: Total of Class + Lab Hours 26

II. COURSE OBJECTIVES: *Course will:*

* Explore GPS, GIS, and VRT tools to connect data, analyze data to make management descriptions
* Understand the process of preparing and transferring a data outline for field connection.
* Understand what spatial data is and how to use it in decision making
* Evaluate various types of technology in Agriculture
* Collect and analyze soil sampling from a technology aspect.

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES:

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

1. Demonstrate GPS, GIS and VRT tools to make management decisions
2. Prepare and transfer data outlines to use in the field
3. Define and describe the difference between spatial and aspatial data
4. Apply soil sampling knowledge from a technology aspect.

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.** Overview of GPS, GIS, VRT
- **B.** Spatial Mapping
- **C.** Aspatial Mapping
- **D.** Manage Data
- **E.** Different Mapping Systems

V. INSTRUCTIONAL MATERIALS

A. Required Text(s): None

B. Other Resources:

None

VI. METHODS OF PRESENTATION/INSTRUCTION

Methods of presentation typically include a combination of the following:

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

b. Lab Activities

VII. METHODS OF EVALUATION

Methods of evaluation typically include a combination of the following:

a. Quizzes, tests, and exams
b. Skills project and exam
c. Daily Evaluation
d. 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.
b. Properly and safely operate all college tractors and equipment.
c. Utilize proper safety eyewear at all times in lab