

Course Code: AGB 110

Course Title: Introduction to Precision Agriculture

Department: Agricultural Technologies

Effective Date: Summer 2026

PCS Code: 1.2 - Occupational/Technical Instruction

CIP Code: 01.0101

Repeatability: 0

Credit Hours

Catalog Notation: 1-0-1

Credit Hour Distribution:

Lecture: 1

Lab: 0

Clinical: 0

Total: 1

General Course Information

Catalog Description

Introduction to precision agriculture, including history, applications, terminology, data management, and software. Exploration of precision agriculture career opportunities.

General Course Objectives

Students will understand current applications and issues in precision agriculture including terminology, data management, and current software used. Students will also explore academic and career opportunities in precision agriculture.

Minimum Placement Levels

English	Reading	Math
Placement into ENG 098	Placement into CCS 098	Placement into MAT 060

Prerequisites

None

Methods of Evaluation

The minimum number of evaluation methods include: 3 tests, 1 project, and 1 final exam.

Instructional Materials and Additional Supplies

None.

Course Content

General Learning Outcomes (GLOs)

- Reasoning and Inquiry: Students will demonstrate the ability to solve problems using deductive reasoning and logic, quantitative reasoning, or the scientific method.
- Technology: Students will demonstrate the ability to evaluate, select, and appropriately use current and emerging tools.

Course Segments and Student Learning Outcomes

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Introduction to Precision Agriculture	<ol style="list-style-type: none"> Define basic precision agriculture terminology. Identify key elements in the history and development of precision agriculture. Describe agricultural enterprises that can benefit from precision agriculture tools. 	2	0	0
Precision Agriculture Applications	<ol style="list-style-type: none"> Relate precision agriculture applications of yield, soil analysis, field boundaries, and planting operations. Describe the applicability of precision agriculture information. 	6	0	0
Components of Precision Agriculture Systems	<ol style="list-style-type: none"> List and describe the components of a successful precision agriculture program. Explain uses of data gathered. Differentiate uses and benefits of specific platforms. List available software for precision agriculture and reporting of results. 	6	0	0
Academic and Career Exploration in Precision Agriculture	<ol style="list-style-type: none"> Identify higher education opportunities for precision agriculture. Identify career opportunities and skills necessary for successful future employment. 	1	0	0

Total Contact Hours

Lecture Hours	Lab Hours	Clinical Hours
15	0	0