

Course Code: AGB 113

Course Title: Introduction to Agriculture Retail Operations

Department: Agricultural Technologies

Effective Date: Summer 2026

PCS Code: 1.2 - Occupational/Technical Instruction

CIP Code: 01.0205

Repeatability: 0

Credit Hours

Catalog Notation: 2-2-3

Credit Hour Distribution:

Lecture: 2

Lab: 2

Clinical: 0

Total: 3

General Course Information

Catalog Description

Introduction to the daily operations of a retail agribusiness organization, including agriculture retail business operations, management of customer services and products, delivery of products, and inventory management.

General Course Objectives

- Students will understand the overview of the operations necessary to manage an agriculture retail facility.
- Students will develop proficiency in common agribusiness software for inventory management of products, logistics of services, and delivery of products, and will simulate agriculture retail operation activities.

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: 7 labs, 4 practical exams - 1) audit inventory, 2) dispatching, 3) customer invoicing, and 4) automated control; 5 quizzes, and 1 final exam.

Instructional Materials and Additional Supplies

Utilization of AgVance software

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
Agribusiness Retail Organizations	<ol style="list-style-type: none"> Describe the role of agribusiness retail organizations in the agriculture supply chain. Describe the organizational structure, including the roles and functions of the structural elements (departments) of an agriculture retail facility. Give examples of communication and work order processes, including those between sales teams and customer interactions. 	6	4	0
Agriculture Products Inventory Management	<ol style="list-style-type: none"> Describe accurate inventory procedures, including the recording of incoming and outgoing product (fertilizer, seed, chemicals, liquid fertilizer). Prepare all required paperwork to promote accurate inventory. Simulate management strategies for assigned product ordering, profitable pricing, inventory control, and receivables. Audit inventory levels and input into inventory tracking software. 	6	6	0
Agriculture Product Logistics	<ol style="list-style-type: none"> Describe the system of product applications (fertilizer, seed, chemicals, liquid fertilizer) in an agriculture retail facility. Schedule product delivery using agriculture software dispatching tools. Assign multiple application jobs. Prioritize application jobs based on customer needs. Determine total product needed to be dispatched. Interpret weather data, field boundaries, and driver location maps for accurate dispatching of products. Prepare work orders. Dispatch paperwork for custom application jobs. 	6	8	0
Agriculture Retail Accounting	<ol style="list-style-type: none"> Describe the annual budget planning process. Integrate product pricing with customer account information, including billing and payments. Generate customer invoices. Manage customer billing splits, discounts, and pricing at the line item level. 	4	4	0
Agriculture Product Loading of Fertilizer and Chemicals	<ol style="list-style-type: none"> Describe the process of plant operations, including dry fertilizer blending and loading, the handling of anhydrous ammonia, and the mixing and handling of agricultural chemicals and liquid fertilizer. Explain each component function (weighing, metering, software, command controls) of an automated blending and delivery product system. Utilize an automated blending and delivery product system to accurately measure/weigh, dispense, and load fertilizers and chemicals for application. 	8	8	0

Total Contact Hours

Lecture Hours	Lab Hours	Clinical Hours
30	30	0