

Course Code: AGB 211

Course Title: Plant Pest Identification and Control

Department: Agricultural Technologies

Effective Date: Summer 2026

PCS Code: 1.2 - Occupational/Technical Instruction

CIP Code: 01.0304

Repeatability: 0

Credit Hours

Catalog Notation: 3-0-3

Credit Hour Distribution:

Lecture: 3

Lab: 0

Clinical: 0

Total: 3

General Course Information

Catalog Description

Identification and control of weeds, insects, and diseases. Control methods include prevention, biological control, resistant varieties, and pesticides. Pesticide terminology, formulations, calibration, environmental concerns, safe handling, and laws and regulations concerning pesticides.

General Course Objectives

- To be able to recognize potential plant pest problems.
- To be able to implement an Integrated Pest Management (IPM) plan by utilizing various practical control methods.

Minimum Placement Levels

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

Prerequisites

Credit in AGB 103 or AGB 104

Methods of Evaluation

The minimum methods of evaluation include: 8 quizzes, 3 identification assignments, a research paper, 1 calibration exam, 1 final exam, and a pesticide operator license exam.

Instructional Materials and Additional Supplies

- Illinois Pesticide Applicator Training Manual: General Standards, #SP39, current edition; U of I/Ag Extension Manual. Pubs Plus.
- Pesticide Applicator Training: General Standards Workbook, #SP-39W, current edition; U of I/Ag Extension Manual.
- Field Crop Scouting Manual, current edition; U of I/Ag Extension.

Course Content

General Learning Outcomes (GLOs)

- **Critical Thinking and Information Literacy:** Students will demonstrate the ability to evaluate perspectives, evidence, and implications, and to locate, assess, and use information effectively.
- **Reasoning and Inquiry:** Students will demonstrate the ability to solve problems using deductive reasoning and logic, quantitative reasoning, or the scientific method.

Course Segments and Student Learning Outcomes

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Applying the Fundamentals of Integrated Pest Management	<ol style="list-style-type: none"> 1. Define the concept of Integrated Pest Management. 2. Identify strategies used by producers. 	3	0	0
Weed Identification and Control	<ol style="list-style-type: none"> 1. Define and identify existing weed problems in crop production. 2. Identify control procedures for specific weed problems. 3. Learn how to identify potential problems with soil applied, pre-emergence, and post-applied herbicides. 4. Identify the economic injury level and economic threshold for weed problems. 	8	0	0
Insect Identification and Control	<ol style="list-style-type: none"> 1. Define existing or potential insect problems in crop production. 2. Identify control procedures for specific insect problems. 3. Identify the economic injury level and economic threshold for insect problems. 	8	0	0
Disease Identification and Control	<ol style="list-style-type: none"> 1. Define existing or potential crop disease plant problems in crop production. 2. Identify control procedures for specific disease problems. 3. Identify the economic injury level and economic threshold for disease problems. 	8	0	0
Sprayer Equipment Calibration	<ol style="list-style-type: none"> 1. Demonstrate the proper sprayer equipment required to perform pesticide applications. 2. Apply proper calibration procedures to achieve effective pest control. 	6	0	0
Pesticide Safety - Environmental and Human Pesticide Protection	<ol style="list-style-type: none"> 1. Explain the environmental impact of improper use of pesticides. 2. Define the application procedures for transport and mixing of pesticides. 3. Choose the correct Personal Protective Equipment (PPE) for a given pesticide. 4. Explain the detrimental effects of using incorrect PPE. 	6	0	0
Pesticide Laws and Regulations	<ol style="list-style-type: none"> 1. Describe the implementation of state and federal pesticide laws and regulations. 2. Choose the correct pesticide applications based on product label requirements. 3. Choose the proper handling and disposal of pesticides and containers based on product label requirements. 4. Explain and interpret pesticide product labels. 	6	0	0

Total Contact Hours

Lecture Hours	Lab Hours	Clinical Hours
45	0	0