Course Information Form (CIF)

Course Code: AGB 103 (IAI AG 903)
Course Title: Introduction to Crop Science

Department: Agricultural Technologies
PCS Code: 1.1 - Baccalaureate/Transfer
CIP Code: 01.1102
Repeatability: 0

Effective Date: Summer 2026

Credit Hours

Catalog Notation: 3-2-4
Credit Hour Distribution:

Lecture: 3	Lab: 2	Clinical: 0	**Total: 4**

General Course Information

Catalog Description

Various plant species of economic importance; principles of plant growth, environment, selection, classification, cultural practices; weed, insect, and disease identification and control.

General Course Objectives

- To gain an appreciation of crop science and the application of related fields to its understanding and improvement.
- To develop an understanding of processes involved in plant growth and the influence of humans and the environment.
- To develop management skills in making decisions on types of crops to grow and cultural practices to put into use.

Minimum Placement Levels

English	Reading	Math
None	Placement out of CCS 098	None

Prerequisites

None

Methods of Evaluation

The minimum methods of evaluation include: 4-5 hourly exams, 10 lab exercises, 14 chapter assignments, and 1 final exam.

Instructional Materials and Additional Supplies

Introduction to Agronomy, Sheaffer and Moncada, current edition.

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.

Course Segments and Student Learning Outcomes

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Importance of Crop Plants	1. Recognize a) major crops produced in Illinois, b) major crops produced in the United States and major agricultural regions, and c) major crops produced in the world and the countries that excel in crop production.	2	2	0
Crop Classification Systems and Characteristics	1. Describe the value of the four major crop classification systems used in the United States: a) Crop rotation, b) life cycle, c) agronomic use, and d) botanical classification.	2	6	0
Crop Plants in Relation to the Environment	1. List the environmental factors related to growth of crops. 2. Describe the four major climate factors. 3. Explain the importance and function of the three major light factors. 4. Explain the influence of air on a plant's growth rate. 5. Explain why we have various types of soils, the inherited characteristics of soils, and the associated land features. 6. Describe the kinds, types, and amounts of fertilizer to apply on corn, turf, alfalfa, wheat, and soybeans. 7. Demonstrate how to identify the common weeds in East Central Illinois. 8. List what kind and how to control weeds by herbicides and the use of cultural/mechanical practices. 9. List and identify the common diseases and insects that attack corn, soybeans, alfalfa, wheat, and turf grasses. 10. List what insecticides and fungicides to apply for a particular insect and disease and how to apply. 11. Summarize how to control insect and disease pests by the use of cultural/mechanical practices, biological control, resistant varieties, repellents, etc. (IPM)	12	5	0
Growth and Development of Crop Plants	1. List the parts of a plant. 2. Describe the function of each plant part. 3. Explain the basic physiological makeup of each part. 4. Explain how legumes and grasses germinate. 5. Discuss the basic procedures for crop improvement. 6. Describe how to select plants according to genetic principles. 7. Explain how hybrid seed is produced.	4	6	0
Crops of Economic Importance in Illinois: Corn	1. Summarize the management practices needed to successfully grow and produce crops for the marketplace. 2. Describe the complete production cycle involved in producing a crop of corn, including types, uses, stages of growth, seedbed preparation, reproduction and breeding, cultural practices, weed/insect/disease control, and harvesting.	8	8	0
Crops of Economic Importance in Illinois: Soybeans	1. Describe the complete production cycle involved in producing a crop of soybeans, including types, uses, stages of growth, varieties, cultural practices, weed/insect/disease control, and harvesting.	6	0	0

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
Crops of Economic Importance in Illinois: Wheat	1. Describe the complete production cycle involved in producing a crop of wheat, including types, uses, stages of growth, varieties, cultural practices, weed/insect/disease control, and harvesting.	3	0	0
Crops of Economic Importance in Illinois: Alfalfa and Other Forage Crops	1. Describe the complete production cycle involved in producing a crop of grasses/legumes, including types, uses, stages of growth, varieties, importance, and cultural practices. 2. List what grasses and legumes are considered to be the major forage crops in Illinois. 3. Identify the common legumes and grasses grown in Illinois.	3	0	0
Other Crops of Economic Importance in Illinois	1. Recognize other crops of importance in the state of Illinois.	2	1	0
New Developments/Technologies in Crop Production	1. Describe the importance of new developments and technologies as they relate to crop production.	3	2	0

Total Contact Hours

Lecture Hours	Lab Hours	Clinical Hours
45	30	0