

<IGNITE>TM PATHWAYS

COURSE SYLLABUS

COURSE 117: CROP PRODUCTION

TERM: SPRING 2023

FACULTY INFORMATION:

Instructor: Justin Mills	IGNITE Pathways: North Lab
Phone: 712-647-3526	E-mail: jmills@ignite-pathways.com

COURSE INFORMATION:

Course Description: Overview of crops and cropping systems in the context of global and US agriculture. Focus on agronomic principles, constraints, and opportunities as they apply to various locations in Iowa, the United States, and the world.

Course Meeting Times:

T/Th 12:15-1:35

Monday Lab - 9:00-11:45 OR 12:15-3:00

Course Location:

IGNITE Pathways - North Lab

Course Learning Outcomes:

Upon successful completion of this course, the student will be able to:

- Describe the growth and development of corn, soybeans, small grains and forages and recognize how the stage of growth influences management decisions.
- Apply crop management principles to real-world production situations.
- Select strategies that optimize inputs and conserve natural resources needed to produce high-quality, high-yielding crops.
- Evaluate the impact management decisions have on crop growth and yield.

Iowa Career and Technical Education Standards: Agriculture

- PS.01 Develop and implement a crop management plan for a given production goal that accounts for environmental factors.
- PS.02 Apply principles of classification, plant anatomy, and plant physiology to plant production and management.
- PS.03 Propagate, culture, and harvest plants and plant products based on current industry standards.

Completion of course could lead to the following certification:

- Precision Exam: Plant and Soil Science I

Instructional Techniques and Practices: Techniques utilized will include lecture, individual and group discussions, and lab exercises. Virtual options may also be utilized.

IGNITE Pathways Expectations:

- Demonstrate proficiency by all modules identified by CTE course and instructor.
- Meet all lab requirements associated with CBE.
- Meet appropriate core requirements.

Potential Core Credits:

- English (1 credit); US History (1 credit), World History (1 credit), Government (1 credit), Sociology (1 credit); Unified Science (1 credit)

TENTATIVE COURSE SCHEDULE:

Tentative Schedule - Topics are subject to change based on availability based on resources.

Topics ~ Each topic will be covered in approximately two weeks.
Environment
Fertility
Nutrients
Corn Production
Soybean Production
Small Grain & Forage Production
Inputs
Crop Budgets