**BARTON COMMUNITY COLLEGE**

##### COURSE SYLLABUS

## GENERAL COURSE INFORMATION

Course Number: CNHI 1210

Course Title: Precision Farming Systems

Credit Hours: Variable 1-3

Prerequisites: None

Division/Discipline: Career & Technical Education

Course Description: This course is designed to develop those skills necessary for the student to accurately and correctly diagnose, repair, and utilize precision farming systems.

Variable Credit: If the student enrolls in a 4-day face to face diagnostics class, then it is a 2 credit hour course. If the student enrolls in a 2-day product update class it is a 1 credit hour course, and if the student enrolls in the 6-week online and 2-day face to face class, it is a 3 credit hour course. All sections of the course cover the same material.

## INSTRUCTOR INFORMATION

## COLLEGE POLICIES

Students and faculty of Barton Community College constitute a special community engaged in the process of education. The college assumes that its students and faculty will demonstrate a code of personal honor that is based upon courtesy, integrity, common sense, and respect for others both within and outside the classroom.

Plagiarism on any academic endeavors at Barton Community College will not be tolerated. The student is responsible for learning the rules of, and avoiding instances of, intentional or unintentional plagiarism. Information about academic integrity is located in the Student Handbook.

The College reserves the right to suspend a student for conduct that is determined to be detrimental to the College educational endeavors as outlined in the College Catalog, Student Handbook, and College Policy & Procedure Manual. (Most up-to-date documents are available on the College webpage).

Any student seeking an accommodation under the provisions of the Americans with Disability Act (ADA) is to notify Student Support Services via email at disabilityservices@bartonccc.edu.

## COURSE AS VIEWED IN THE TOTAL CURRICULUM

This course is one in a series of training classes developed for currently employed technicians. This course may be taught as a full three credit hour class, or broken into three one credit hour sub classes; those being yield monitors and yield mapping; desktop software utilization, and prescription planting/gps guidance systems.

This course is one in a series of Case-New Holland Industrial Service Training courses. This course is not open to the general public, and is not designed as a transfer course.

1. **ASSESSMENT OF STUDENT LEARNING**

Barton Community College assesses student learning at several levels: institutional, program, degree and classroom. The goal of these assessment activities is to improve student learning. As a student in this course, you will participate in various assessment activities. Results of these activities will be used to improve the content and delivery of Barton’s instructional program.

Given appropriate training materials, live equipment, and proper diagnostic equipment the student will be able to accurately and efficiently diagnose and repair precision farming equipment.

Course Outcomes, Competencies, and Supplemental Competencies:

1. Demonstrate an understanding of yield monitor systems.
2. Identify components of the system and explain their function
3. Set up the display to view necessary information
4. Calibrate the yield monitor system
5. Operate the system to generate data for yield tables and yield maps
6. Utilize appropriate diagnostic tools and service repair information, accurately diagnose and repair system malfunctions
7. Demonstrate a working knowledge of desktop software.
8. Identify components necessary to manipulate data from yield data previously recorded to produce yield maps
9. Set up field and crop information prior to going to the field
10. Manipulate data previously recorded to develop yield maps
11. Analyze and interpret results of yield maps
12. Demonstrate a working knowledge of prescription planting/light bar guidance/auto steer systems.
13. Identify equipment necessary for prescription planting and light bar guidance systems.
14. Identify those inputs capable of being controlled by application systems
15. Utilize all available information develop input prescription applications for a given field
16. Identify necessary equipment for light bar guidance/Auto steer systems
17. Setup, calibrate, and use lightbar/guidance system
18. Diagnose and repair system malfunctions

## INSTRUCTOR'S EXPECTATIONS OF STUDENTS IN CLASS

## TEXTBOOKS AND OTHER REQUIRED MATERIALS

### REFERENCES

### METHODS OF INSTRUCTION AND EVALUATION

## ATTENDANCE REQUIREMENTS

## COURSE OUTLINE