**BARTON COMMUNITY COLLEGE**

##### COURSE SYLLABUS

## I. GENERAL COURSE INFORMATION

Course Number: AGRI 1132

Course Title: Farm Machinery Repair

Credit Hours: Variable 1-3

Prerequisites: None

Division/Discipline: Workforce Training and Com. Education/CNH Service Training

Course Description: A study of the theory of operations, repair, and adjustment of

 machines used on a farm operation.

## II. INSTRUCTOR INFORMATION

## III. 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.

## IV. COURSE AS VIEWED IN THE TOTAL CURRICULUM

This course is designed for the current CASE-New Holland dealer technician. Participation in this course is solely for the purpose of maintaining technician skill levels as they relate to the 2300 series combine hydraulic and electrical systems.

This course is not intended to transfer to another institution by design.

# **V. 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.

Course Outcomes, Competencies, and Supplemental Competencies:

1. Upon successful completion of this course, the student will be able to determine whether a problem with a combine is hydraulic, electrical, mechanical, or operator error.
2. Locate, identify, and describe the operation of given hydraulic components both on the combine and on the bench.
3. Demonstrate an understanding of each main valve hydraulic function and reel drive circuit to accurately diagnose and repair malfunctions within each hydraulic circuit.
4. Locate, identify, and describe the purpose of given electrical components both on the combine and one the bench
5. The student will also have the skills to formulate a plan to affect repair of the machine.
6. Locate electrical schematic symbols using provided schematics to the extent that all symbols can be identified.
7. Demonstrate all calibration processes as outlined in the service training manual, operator’s manual, and service repair manual.
8. Demonstrate the proper use of a DVOM in testing of electrical components and circuits.
9. Retrieve diagnostic codes, both active and historical, and utilize that information for diagnostic purposes.
10. Locate hydraulic symbols on a schematic and identify function and operation of the symbol.
11. Demonstrate the proper use of hydraulic diagnostic equipment to accurately check, diagnose, and set hydraulic system pressures and flows.

## VI. INSTRUCTOR'S EXPECTATIONS OF STUDENTS IN CLASS

## TEXTBOOKS AND OTHER REQUIRED MATERIALS

### REFERENCES

### METHODS OF INSTRUCTION AND EVALUATION

## ATTENDANCE REQUIREMENTS

## COURSE OUTLINE