Course Information Form (CIF)

Course Code: DPE 238

Course Title: Vehicular Air Conditioning II

Department: Agricultural Technologies
PCS Code: 1.2 - Occupational/Technical Instruction
CIP Code: 47.0604
Repeatability: 0

Effective Date: Summer 2026

Credit Hours

Catalog Notation: 0-2-1
Credit Hour Distribution:

Lecture: 0	Lab: 2	Clinical: 0	**Total: 1**

General Course Information

Catalog Description

Principles and theory of air conditioning systems on agricultural heavy equipment and trucks.

General Course Objectives

Students will perform lab tasks based on lessons learned in DPE 234 lectures.

Minimum Placement Levels

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

Prerequisites

Credit in DPE 130 and DPE 234

Methods of Evaluation

The minimum number of evaluation methods include: 8 workbook projects and 2 objective exams.

Instructional Materials and Additional Supplies

Auto Heating and Air Conditioning (textbook), 5th edition, Chris Johanson. 978-1-61960-763-7
Auto Heating and Air Conditioning (workbook), 5th edition, Chris Johanson. 978-1-60525-014-4
Students will need the required tool set for the Diesel Power program.

Course Content

General Learning Outcomes (GLOs)

- Technology: Students will demonstrate the ability to evaluate, select, and appropriately use current and emerging tools.

Course Segments and Student Learning Outcomes

Course Segment	Learning Outcomes	Lecture Hours	Lab Hours	Clinical Hours
R-1234yf Troubleshooting and Service Skills	1. Utilize test equipment to determine the operating condition of R-1234yf systems.	0	12	0
R-134A Troubleshooting and Service Skills	1. Utilize test equipment to determine the operating condition of R-134A systems.	0	12	0
Component Identification, Repair, and Retrofitting	1. Evaluate the components in both R-1234yf and R-134A systems. 2. Describe what components can be repaired versus replaced. 3. Show an ability to recognize component differences between R-1234yf and R-134A. 4. Evaluate an R-1234yf system to determine when to recommend a retrofit to R-134A. 5. Describe how to retrofit a system.	0	6	0

Total Contact Hours

Lecture Hours	Lab Hours	Clinical Hours
0	30	0