Hibbing Community College

HCT 1510: Residential Refrigeration

A. COURSE DESCRIPTION
   Credits: 2
   Lecture Hours/Week: *.*
   Lab Hours/Week: 4
   OJT Hours/Week: *.*
   Prerequisites: None
   Corequisites: HCT 1515
   MnTC Goals: None
   Residential refrigeration technology covers residential refrigeration systems, refrigerants, electrical components, refrigeration system construction, proper methods of evacuation and charging. Procedural troubleshooting and repair skills for electrical and sealed system repair of domestic refrigerators and freezers. CREDITS: 2 (0 Lec / 2 Lab)

B. COURSE EFFECTIVE DATES: 08/26/2013 - Present

C. OUTLINE OF MAJOR CONTENT AREAS
   1. Refrigerator/Freezer
      A. Component identification
      B. Component function
      C. Methods of defrost
      D. Wiring diagrams interpretation
      E. Types of relays
      F. Recovery of Refrigerant

D. LEARNING OUTCOMES (General)
   1. Students will orally identify each component on a residential refrigerator.
   2. Students will orally explain each component function on a residential refrigerator.
   3. Students will list and explain each method used to defrost evaporator.
   4. Students will identify schematic symbols versus actual component on the refrigerator.
   5. Students will wire training simulator board for different types of starting relays.
   6. Students will demonstrate the ability to recover refrigerant both active and passive.
   7. Students will demonstrate the ability to charge a refrigeration system.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies
   None

F. LEARNER OUTCOMES ASSESSMENT
G. SPECIAL INFORMATION

HCC COMPETENCIES MET:
Working Productively and Cooperatively
Thinking Creatively and Critically

STUDENT CONTRIBUTIONS:
The student is expected to attend all lectures and working sessions, participate in activities and discussion, listen to and follow direction, complete assignments on time and request assistance when needed. Each student is expected to spend the necessary time to become adept at the procedures and their applications. At all times the student is expected to demonstrate and exercise safety skills and procedures.

STUDENT ASSESSMENT SHALL TAKE PLACE USING INSTRUMENTS SELECTED/DEVELOPED BY THE COURSE INSTRUCTOR.

AASC APPROVAL DATE: January 17, 2018
REVIEW DATE: January 2023