**COLLIN COLLEGE**

**COURSE SYLLABUS**

Course Information

**Course Number:** HART 2436

**Course Title:** Air Conditioning Troubleshooting

**Course Description:** An advanced course in application of troubleshooting principles and use of test instruments to diagnose air conditioning and refrigeration components and system problems including conducting performance tests.

**Course Credit Hours:** 4

Lecture Hours: 2

Lab Hours: 4

**Prerequisites:** HART 1301, HART 1307, HART 1403, and HART 1441

**Student Learning Outcomes:**

* **State-mandated Outcomes: Upon successful completion of the course, students will:**
  1. Test and diagnose components, systems, and accessories. (SCANS: C18, C19, and C20)
  2. Complete applicable documentation. (SCANS: C12 and F2)
* **Additional Collin Outcomes: Upon successful completion of this course, students will:**
  1. Exhibit knowledge of system’s sequence of operation, accessory applications, and component operation. (SCANS: F2, F12, and F9).
  2. Install a residential split-system. (SCANS: C20).
  3. Remove and replace a compressor. (SCANS: C20).
  4. Perform troubleshooting using computer simulations. (SCANS: C20, F12, and F9)

**Secretary’s Commission on the Acquisition of Necessary Skills (SCANS) -** SCANS skills are a group of foundational skills and workplace competencies that the Secretary’s Commission on the Acquisition of Necessary Skills established as vitally important for workplace success in the 21st century. In Collin’s workforce programs, the SCANS skills are developed and reinforced throughout the curriculum to provide students with an opportunity to hone these skills/competencies in the context of their education. Over the course of an entire degree program, the successful student is expected to demonstrate all of the SCANS skills and competencies as part of their education. The SCANS Foundation Skills and Workplace Competencies are described at: <http://www.collin.edu/academics/programs/Workforce_SCANS_Skills_Syllabi_Code_Key.pdf>

**Withdrawal Policy:** See the current *Collin Registration Guide* for last day to withdraw.

**Collin College Academic Policies:** See the current *Collin Student Handbook*

**Americans with Disabilities Act Statement:** Collin College will adhere to all applicable federal, state and local laws, regulations and guidelines with respect to providing reasonable accommodations as required to afford equal educational opportunity. It is the student’s responsibility to contact the ACCESS office, SCC-D140 or 972.881.5898 (V/TTD: 972.881.5950) to arrange for appropriate accommodations. See the current *Collin Student Handbook* for additional information.

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