

Washtenaw Community College Comprehensive Report

UAT 265 HVACR Apprenticeship Practicum Effective Term: Spring/Summer 2014

Course Cover

Division: Advanced Technologies and Public Service Careers

Department: United Association Department

Discipline: United Association Training

Course Number: 265

Org Number: 28200

Full Course Title: HVACR Apprenticeship Practicum

Transcript Title: HVACR Apprenticeship Practicum

Is Consultation with other department(s) required: No

Publish in the Following: College Catalog , Web Page

Reason for Submission: Three Year Review / Assessment Report

Change Information:

Course description

Credit hours

Total Contact Hours

Outcomes/Assessment

Objectives/Evaluation

Rationale: Course update

Proposed Start Semester: Spring/Summer 2014

Course Description: In this course, students will learn about and develop methods of teaching the different sub-topics related to the Five-Year Heating, Ventilating, Air Conditioning and Refrigeration apprentice training program. The use of pressure-enthalpy diagrams as a teaching aid will be stressed. The HVAC Training Manual and associated Student Study Guide/Lab Manual, Instructor's Guide and DVD Series will be used as teaching tools. The ExamView test development program, its applications and how to teach with these tools will be demonstrated. This course, which also focuses on developing classroom presentation skills, will prepare students to teach an introductory HVACR familiarization course to people who have limited HVACR experience. Limited to United Association program participants.

Course Credit Hours

Variable hours: No

Credits: 1

Lecture Hours: Instructor: 15 Student: 15

Lab: Instructor: 0 Student: 0

Clinical: Instructor: 0 Student: 0

Other: Instructor: 5 Student: 5

Total Contact Hours: Instructor: 20 Student: 20

Repeatable for Credit: NO

Grading Methods: Letter Grades

Audit

Are lectures, labs, or clinicals offered as separate sections?: NO (same sections)

College-Level Reading and Writing

College-level Reading & Writing

College-Level Math

Requisites

General Education

Degree Attributes

Below College Level Pre-Reqs

Request Course Transfer

Proposed For:

Student Learning Outcomes

1. Demonstrate teaching practicum on the central concepts of running an HVACR service apprenticeship program.

Assessment 1

Assessment Tool: Presentation

Assessment Date: Spring/Summer 2014

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Performance parameters with rubric

Standard of success to be used for this assessment: 75% of students will achieve 75% or above.

Who will score and analyze the data: Departmental faculty

2. Utilize approved industry and UA course/training materials to teach the HVACR service apprenticeship program.

Assessment 1

Assessment Tool: Checklist

Assessment Date: Spring/Summer 2014

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: checklist

Standard of success to be used for this assessment: 100% of students will use approved materials.

Who will score and analyze the data: Departmental faculty

3. Present an original lecture based on HVACR course materials.

Assessment 1

Assessment Tool: Presentation

Assessment Date: Spring/Summer 2014

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Performance parameters with rubric

Standard of success to be used for this assessment: 75% of students will achieve 75% or above.

Who will score and analyze the data: Departmental faculty

Course Objectives

1. Identify terms and concepts related to vapor compression and refrigeration cycles.

Matched Outcomes

2. Identify the principles of basic electricity, including Ohm's Law as it applies to both direct and alternating current circuits.

Matched Outcomes

3. Demonstrate appropriate use and knowledge of course materials.

Matched Outcomes

4. Identify how to incorporate the HVACR training manuals and DVDs into classroom

presentations.

Matched Outcomes

5. Explain how to incorporate the ExamView program into classroom assignments.

Matched Outcomes

6. Interpret and explain Pressure Enthalpy Diagrams.

Matched Outcomes

7. Demonstrate and explain electrical safety practices.

Matched Outcomes

8. Explain different vapor compression system components.

Matched Outcomes

9. Explain the mechanics of refrigerant piping.

Matched Outcomes

10. Explain the requirements for CFC Certification Training.

Matched Outcomes

11. Demonstrate industry safety practices and identify potential liability issues.

Matched Outcomes

12. Write exams for use in HVACR classes using ExamView.

Matched Outcomes

13. Present information on refrigerant piping to a class.

Matched Outcomes

New Resources for Course

Course Textbooks/Resources

Textbooks

Manuals

Periodicals

Software

Equipment/Facilities

Data projector/computer

Reviewer

Action

Date

Faculty Preparer:

Amanda Scheffler

Faculty Preparer

Jun 27, 2013

Department Chair/Area Director:

Scott Klapper

Recommend Approval

Feb 03, 2014

Dean:

Marilyn Donham

Recommend Approval

Feb 05, 2014

Vice President for Instruction:

Bill Abernethy

Approve

Apr 21, 2014