



# Wayne County Community College District

## COURSE SYLLABUS

### HVA 104 Air Conditioning I

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**CREDIT HOURS:** 4.00

**CONTACT HOURS:** 60.00

**COURSE DESCRIPTION:** This course covers all the heating, ventilation, and air conditioning (HVAC) equipment needed to maintain conditions that equate to healthy standards of human comfort. Also, heating and cooling load calculations factoring in degree/day measurements as used by utility companies will be reviewed. This course is offered in a Fast-Track format with HVA105.

**PREREQUISITES:** HVA 101

#### **EXPECTED COMPETENCIES:**

*Upon completion of this course, the student will be familiar with:*

- Understand the basics of air conditioning for human comfort
- Identify the fundamentals and properties of various types of compressors, refrigerants, related temperatures and pressure, residential window units and central split air conditioning systems
- Identify and demonstrate competency with systems components, wiring diagrams, service and troubleshooting of residential air conditioning units

#### **ASSESSMENT METHODS:**

Student performance may be assessed by examination, quizzes, case studies, oral conversation, group discussion, oral presentations. The instructor reserves the option to employ one or more of these assessment methods during the course.

#### **GRADING SCALE:**

90%-100% = A  
80%-89.9% = B  
70%-79.9% = C  
60%-69.9% = D  
<60% = E