

Course Syllabus

Wayne County Community College District

HVA 101 Basic Refrigeration

CREDIT HOURS: 4.00

CONTACT HOURS: 75.00

COURSE DESCRIPTION:

Co-req: HVA 102

This course covers theories, application and principles of refrigeration and air cooling, basic cycles, systems, components, refrigeration and accessories. The course also includes refrigeration code regulations, safe designs, construction, installation, alteration, inspection, testing and licensing of refrigeration systems.

EXPECTED COMPETENCIES

Upon successful completion of this course, the student will:

1. Be able to identify basic refrigeration components, systems, and accessories
2. Properly use flaring tools on copper tubing and reading measuring tapes
3. Properly use swaging tool on copper tubing
4. Properly measure, cut, fit and solder $\frac{1}{2}$ " or $\frac{3}{4}$ " type "M" tubing with propane (or MAPP) using 95/3 soft solder and proper solder flux and ACR tubing using oxy-acetylene and brazing rod

ASSESSMENT METHODS

Student performance may be assessed by examination, quizzes, case studies, oral reports, group discussion, written reports or 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