



Wayne County Community College District

COURSE SYLLABUS

HVA 120 Advanced Heating and Heating Controls

CREDIT HOURS: 3.00

CONTACT HOURS: 45.00

COURSE DESCRIPTION:

This course covers state-of-the-art heating units as well as the basics of geothermal and passive solar equipment used to assist in heating residential and commercial establishments. In addition, principles of sustainable construction and sustainable mechanical systems are discussed.

PREREQUISITES: HVA 106

EXPECTED COMPETENCIES:

Upon successful completion of the course, the student will:

- Understand and demonstrate correct selection of high efficiency furnaces for residential settings
- Understand the theory of passive solar heating and when to select this type of heating to assist more standard heating systems
- Understand the theory of geothermal heating and cooling and when to select this type of heating and cooling assistance for residential settings

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