

Wayne County Community College District

COURSE SYLLABUS

HVA 111 Applied Electricity in Air Conditioning & Heating

CREDIT HOURS: 3.00

CONTACT HOURS: 45.00

COURSE DESCRIPTION: In this course, the student will learn the fundamentals of electricity as applied to air conditioning, heating and refrigeration, electrical symbols, circuits, electric meters, alternating current, single 3-phase motors, testing, motor protection and troubleshooting.

PREREQUISITES: HVA 100, HVA 106

EXPECTED COMPETENCIES:

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

- Understand and demonstrate competency in electrical symbol identification on blueprints and diagrams
- Understand and demonstrate competency in electrical circuitry, meters, motors and test equipment
- Understand limits of code requirements as it relates to heating and cooling equipment and electrical work

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