Wayne County Community College District

COURSE SYLLABUS

HVA 206 Refrigeration Operators Exam Preparation

CREDIT HOURS: 3.00

CONTACT HOURS: 45.00

COURSE DESCRIPTION:
This course covers fundamentals of refrigeration, compressors and their types, capacity controls, starting, stopping and operation, valves shapes, booster pumps, pump out dual suction compressors, lubrication systems and lubricants, shaft seals and cylinder cooling, type of evaporators, cooling towers and spray ponds, accumulators and separators, samples of multiple choice questions, systems diagrams. Sequence of operations and calculation problems will be covered.

PREREQUISITES: NONE

EXPECTED COMPETENCIES:
Upon completion of this course, the student will be familiar with:
- Describe the fundamental concepts that form the basis of the book.
- Discuss the basic physical, chemical, and engineering principles, which apply to refrigeration.
- Define basic air conditioning terms.
- Describe the basic operation of air conditioning.
- Heating Cooling load calculations.
- Basic psychometrics.
- How to use various meters.
- Different types of air conditioning systems.
- Electrical and Mechanical safety precautions.
- Explain the basic controls used in HVAC.

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