

Course Syllabus

Wayne County Community College District

HVA 201 Intro To Boiler Plant Maint.

CREDIT HOURS: 3.00

CONTACT HOURS: 45.00

COURSE DESCRIPTION:

This course covers water and steam, steam cycles, blow down, characteristics of steam and type of steam piping and systems. Also low pressure boilers and boiler room accessories, safety devices, their function and testing, fire tubes, boiler plant auxiliaries, pumps, injectors, regulators, feed-water heaters, valves, traps, separators, water treatment principles, scale prevention, reactions under temperature and pressure, boiler water circulation, feeds and construction, impaired testing, operation of boiler and boiler efficiency improvement techniques will be covered.

EXPECTED COMPETENCIES

Upon successful completion of this course, the student will:

1. Understand the fundamentals of steam, steam cycles; blow down, characteristics of steam and type of piping and systems
2. Understand the fundamentals of low pressure boilers and boiler room accessories, safety devices, their function and testing, fire tubes, boiler plant auxiliaries, pumps, injectors, regulators, feed-water heaters, valves, traps, separators, water treatment principles, scale prevention, reaction under temperature and pressure, boiler water circulation, feeds and construction, impaired testing, operation of boiler efficiency improvements techniques

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