



Wayne County Community College District

COURSE SYLLABUS

HVA 205 Steam I

CREDIT HOURS: 3.00

CONTACT HOURS: 45.00

COURSE DESCRIPTION:

This course examines high pressure fire tube and water tube boilers along with their various applications. Topics covered include boiler design and construction, boiler fittings, steam and water auxiliaries, fuel burning equipment, draft, instrumentation and combustion controls, boiler water treatment, steam boiler operation and licensing.

PREREQUISITE: *HVA 200*

EXPECTED COMPETENCIES:

Upon completion of the course, the student will be able to:

- Understand safe and efficient boiler operation practices including start-up, shut down,
- Understand preparation for inspection, smoke control, combustion control, flame sensing and venting.
- Demonstrate knowledge of boiler appliances and auxiliaries, fuel pumps, regulators, alarms, safety valves, gauges and performance indicator devices.

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