



COURSE SYLLABUS

DIVISION: Workforce Services

Revised: January 2015

CURRICULUM IN WHICH COURSE IS TAUGHT: Integrated Systems Technology

COURSE NUMBER AND TITLE: MEC 169 - Steam Systems

CREDIT HOURS: 2-3

HOURS/WEEK LECTURE: 1-2

HOURS/WEEK LAB: 2

LECTURE/LAB COMBINATION: 3-4

The OEE classes are self-paced study classes in which a student has 16 weeks to complete once enrolled. Students will complete all lab and bookwork before doing the end of chapter tests. All end of chapter tests and final exams are closed book. Upon completion of the lab, all tools, components, and supplies shall be returned to their proper location.

- I. CATALOG DESCRIPTION:** Introduces the components, principles and applications of various commercial and industrial steam and thermal controlled systems. Covers how to calculate and measure pressure, flow and system performance.
- II. RELATIONSHIP OF THE COURSE TO CURRICULUM OBJECTIVES IN WHICH IT IS TAUGHT:**
To create a working knowledge of mechanical steam systems as related to industrial maintenance.
- III. REQUIRED BACKGROUND:** This course is intended for anyone with an interest in and desire to learn the subject matter. No prior knowledge of the subject matter is required.
- IV. COURSE CONTENT**
 - Introduction to the major concepts of a steam system
 - Basic vocabulary
 - Steam system science
 - Boilers
 - Boiler components
 - Steam systems
 - Air and condensate control
 - Pressure control
 - Temperature control
 - Condensate recovery systems
 - Steam system performance

V. Learner Outcomes**VI. Evaluation**

Have an understanding of a steam system	Class participation, homework, quizzes, and final exam
Apply basic skills of a steam system, symbols, specifications and their applications to a steam process system.	Class participation, homework, quizzes, and final exam

VII. The course supports the following general education goals/objectives:DCC Educational Objectives

- Communication
- Critical Thinking
- Information Literacy
- Quantitative Reasoning