

North Hennepin Community College

BIT 1410: Mechanical Inspection

A. COURSE DESCRIPTION

Credits: 4

Lecture Hours/Week: *.*

Lab Hours/Week: *.*

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course acquaints the student with the methods and techniques using the Minnesota Mechanical Code in plan review and field inspection of mechanical systems that including heating, ventilation, air conditioning and refrigeration. The course is intended for anyone looking for a BIT degree/certificate, students pursuing a Construction Management degree, or those entering the mechanical inspection field. Ability to deal with equational material is essential, therefore prior math skills are recommended. For BIT students BIT 1000, Math 0901 and CMSV 2860 or equivalent knowledge are recommended before taking this course.

B. COURSE EFFECTIVE DATES: 07/16/1997 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Basis for mechanical codes
2. Testing and inspection techniques
3. Appliance venting
4. Heating/cooling equipment
5. Duct design and energy code
6. Fuel piping and connections
7. Hydronic heating
8. Understanding heating/cooling calculation

D. LEARNING OUTCOMES (General)

1. Describe basic components of the MN Mechanical Code as it relates to inspections (Program Goals 1, 2, 4; NHCC Core Ability Critical Thinking, comps. a, b; NHCC Core ability Written and Oral communication, comps. c, d, g)
2. Apply referenced standards identified in the MN Mechanical Code to required inspections (Program Goals 1, 2, 3; NHCC Core Ability Ethical and Civic Responsibility, comps. b, c, d)
3. Discuss the intent of the MN Mechanical Code (Program Goals 1, 2)
4. Recognize and apply variables in the interpretation of the MN Mechanical Code to mechanical inspections (Program Goals 1, 2, 3; NHCC Core Ability Critical Thinking, comps. a, b, c, d)
5. Compare and contrast different applications of mechanical systems (Program Goals 1, 2, 2; NHCC Core Ability Critical Thinking, comps. a, b, c)
6. Identify tools used in calculating and inspecting mechanical systems. (Course goal)
7. Discuss and demonstrate effective communication and listening skills related to working with consumers, contractors and industry professionals (Program Goal 4; NHCC Core Ability Written and Oral Communication, comps. b, c, d, g)

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted