

# North Hennepin Community College

## BIT 1310: Plan Review Structural

### A. COURSE DESCRIPTION

Credits: 2

Lecture Hours/Week: \*.\*

Lab Hours/Week: \*.\*

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course will introduce the techniques of conducting the structural plan review of a building design with special emphasis on wood frame construction, wood beams, joists, rafters, studs, columns and shear-resisting elements. Students will learn how to apply relevant equations to computer load, shear and other relevant structural forces.

Ability to deal with equational material is essential, therefore prior math skills are recommended.

For BIT students CMSV 2860 or equivalent knowledge is recommended before taking this course.

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

### C. OUTLINE OF MAJOR CONTENT AREAS

1. Characteristics of wood and related construction materials
2. Understanding physical forces such as load and shear
3. The structural components of wood frame construction
4. Codes related to wood frame construction
5. Tables and calculations

### D. LEARNING OUTCOMES (General)

1. Identify the typical components and requirements for a structural building plan. (Program Goals 2, 3)
2. Become familiar with the requirements of the Building Code related to structural factors. (Program Goal 1)
3. Find applicable codes in code sources that are relevant to structural plan documents ( Program Goals 1, 2; NHCC Core Ability Critical Thinking, comps. a, c)
4. Identify the variables that affect code application and interpretation related to structural components (Program Goals 1, 3; NHCC Core Ability Critical Thinking, comps. a, c, b, c; NHCC Core Ability Ethical and Civic Responsibility, comps. b, c, d)
5. Apply appropriate equations to compute basic requirements for standard situations. (course goal)

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

None

### F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

### G. SPECIAL INFORMATION

None noted