Minnesota State University Moorhead

CM 350: Structural Design and Analysis

A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 3

Lab Hours/Week: 0

OJT Hours/Week: *.*

Prerequisites: ENG 243; OR CM 223

Corequisites: None

MnTC Goals: None

The course will cover concepts for analyzing and designing beams and columns. Principles of shear and moment diagrams and their applications to the selection of adequate structural members under given loading conditions are analyzed. Structural steel, timber, and reinforced concrete materials will be discussed.

B. COURSE EFFECTIVE DATES: 02/11/2001 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Analysis and Design of Construction Systems
2. Construction Methods and Materials

D. LEARNING OUTCOMES (General)

1. The student will apply scientific knowledge to applications of applied mechanics, engineering design fundamentals, and associated mathematics to the construction practices and processes.
2. The student can demonstrate knowledge of the science of materials and methods of construction as they apply to the 16 Construction Specifications Institute (CSI) Divisions designated for the construction industry.

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

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted