

# Minnesota State University Moorhead

## CM 216: Construction Graphics

### A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 3

Lab Hours/Week: 0

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course introduces construction print reading fundamentals and utilizes examples related to residential construction. Course material reinforces methods of construction/terminology and appropriate use of building materials. Students will utilize 3-D CAD modeling software for the design and layout of a residential construction project. Through the creation of a set of construction drawings, lecture materials will be reinforced while emphasizing the design process of a construction project. Students are expected to use CAD software in subsequent coursework and for CM 492 - Capstone Experience.

**B. COURSE EFFECTIVE DATES:** 03/08/2005 - 02/01/2024

### C. OUTLINE OF MAJOR CONTENT AREAS

1. Demonstrate the building design process integrating by incorporating all the components of wall, floor, and roof systems required to complete a building project, including detailing.
2. Produce a set of construction drawings that will be graded by the instructor for clarity, completeness, and ability to communicate their intentions to the local building authority.
3. Produce a complete set of architectural drawings including foundation plans, floor plans, interior and exterior elevations, door and window schedules, electrical plans, and plumbing plans.
4. Utilize the Revit Architecture software to produce the assigned construction drawings.

### D. LEARNING OUTCOMES (General)

1. Students will develop an effective understanding of how to read analyze construction drawings and associated nomenclature.
2. Students will develop an effective understanding of construction materials and techniques through the creation of a set of construction drawings.
3. Students will apply CAD software to develop a set of construction drawings.

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

None

### F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

### G. SPECIAL INFORMATION

None noted