

Course discipline/number/title: CR 1600: Carpentry Theory I

A. CATALOG DESCRIPTION

1. **Credits:** 3
2. **Hours/Week:** 3
3. **Prerequisites (Course discipline/number):** None
4. **Other requirements:**
5. **MnTC Goals (if any):** NA

B. COURSE DESCRIPTION: This course focuses on traditional and modern building systems and the materials, techniques, tools, and equipment used in the construction industry.

C. DATE LAST REVISED (Month, year): February, 2025

D. OUTLINE OF MAJOR CONTENT AREAS:

1. Plans, Specs, and Codes
2. Building and Site Layout
3. Foundations
4. Floor Framing
5. Wall Framing
6. Roof Framing
7. Stairs
8. Building Envelope
9. Windows and Exterior Doors

E. LEARNING OUTCOMES (GENERAL): The student will be able to:

1. understand the relationship between plans, specs, and codes and their importance to construction.
2. identify the techniques and equipment used in building layout.
3. identify and describe various foundation types.
4. identify and describe various foundation materials.
5. identify and describe parts of floor framing systems and techniques.
6. identify and describe parts of wall framing systems and techniques.
7. identify and describe parts of roof framing systems and techniques.
8. identify and describe parts of stair layout and construction.
9. determine stair layout.
10. identify and describe parts of the building envelope.
11. identify window and door types.
12. describe window and door installation.

F. LEARNING OUTCOMES (MNTC): NA

G. METHODS FOR EVALUATION OF STUDENT LEARNING: Methods may include but are not limited to:

1. Research Assignments
2. Quizzes
3. Exams

H. RCTC CORE OUTCOME(S). This course contributes to meeting the following RCTC Core Outcome(s):
Critical Thinking. Students will think systematically and explore information thoroughly before accepting or formulating a position or conclusion.

I. SPECIAL INFORMATION (if any): None