

MINNESOTA WEST COMMUNITY & TECHNICAL COLLEGE

COURSE OUTLINE

DEPT. AGRI

COURSE NUMBER: 2220

NUMBER OF CREDITS: 3

Lecture: 1 Lab: 2 OJT: 0

Course Title:

Building Construction Technology

Catalog Description:

Building Construction Technology introduces instructional and laboratory exercises in light frame Building Construction Technology introduces instructional and laboratory exercises in light frame building construction. The course provides competence in skill areas including site layout, foundations, plumbing, insulating, sheathing, roofing and electrical wiring. The units are arranged in a logical sequence as to the order in which the various phases of construction are performed. Special emphasis is placed on safety and the use of modern tools, materials, and prefabricated components.

Prerequisites or Necessary Entry Skills/Knowledge:

None

FULFILLS MN TRANSFER CURRICULUM AREA(S) (*Leave blank if not applicable*)

- Goal 1: Communication: By meeting the following competencies:
- Goal 2: Critical Thinking: By meeting the following competencies:
- Goal 3: Natural Sciences: By meeting the following competencies:
- Goal 4: Mathematics/Logical Reasoning: By meeting the following competencies:
- Goal 5: History and the Social and Behavioral Sciences: By meeting the following competencies:
- Goal 6: The Humanities and Fine Arts: By meeting the following competencies:
- Goal 7: Human Diversity: By meeting the following competencies:
- Goal 8: Global Perspective: By meeting the following competencies:
- Goal 9: Ethical and Civic Responsibility: By meeting the following competencies:
- Goal 10: People and the Environment: By meeting the following competencies:

Topics to be Covered

Safe Work Environments

Hand and Power Tool Safety

Leveling Instruments and Design

Footings and Foundations

Building Materials and Tools

Electrical Wiring

Wall Construction and Insulation
Plumbing
Roofing

Student Learning Outcomes
Develop a safe attitude and ability to learn in a laboratory setting
Identify and properly use hand tools and power tools
Develop an understanding of the building materials and hardware used in construction today
Demonstrate how to use a transit to check elevations and lay out building lines.
Demonstrate how to lay concrete slabs and build concrete walls
Demonstrate how to draw and construct wall framing
Identify and properly use plumbing tools and materials
Explain the different types of thermal and sound insulation and how they are used
Demonstrate how to apply drywall to framed walls and ceilings
Explain the different roof styles and parts of a roof frames
Demonstrate how to lay out and construct common rafters
Demonstrate how to properly apply shingles

Is this course part of a transfer pathway: Yes No

Revised Date: 6/2021