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## SECTION HEADING

### AGRI 2220: Building Construction Technology

#### 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.

#### Credits

3

#### Prerequisite

None

#### Corequisite

None

#### Topics to be Covered

1. Safe Work Environments
2. Hand and Power Tool Safety
3. Leveling Instruments and Design
4. Footings and Foundations
5. Building Materials and Tools
6. Electrical Wiring
7. Wall Construction and Insulation
8. Plumbing
9. Roofing

#### Learning Outcomes

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

#### Credit Details

Lecture: 1

Lab: 2

OJT: 0

MnTC Goal Area(s): None