



South Central College

CARP 1123 Residential Principles I

Common Course Outline

Course Information

Description	This course will cover the initial framing of a residential building project. It may involve an addition or remodeling an existing residence. Students will construct basement bearing walls, knee walls, well openings, posts, and beams. Students will install the sill, sill seal, rim joists, floor framing, floor plywood, and wall construction. All types of floor systems and wall framing techniques will be covered and implemented where applicable. (Prerequisite: Declare Carpentry as a major)
Total Credits	5
Total Hours	144

Types of Instruction

Instruction Type	Credits/Hours
Lecture	1/16
Lab	4/128

Pre/Corequisites

Declare Carpentry as a major.

Institutional Core Competencies

Communication - Students will be able to demonstrate appropriate and effective interactions with others to achieve their personal, academic, and professional objectives.

Critical and Creative Thinking - Students will be able to demonstrate purposeful thinking with the goal of using a creative process for developing and building upon ideas and/or the goal of using a critical process for the analyzing and evaluating of ideas.

Course Competencies

1. Compare various types of flooring systems.

Learning Objectives

Identify uses for engineered flooring systems.
Identify uses for common construction lumber flooring systems.

2. Compare various types of wall framing systems.

Learning Objectives

Identify uses for conventional framed walls.
Identify uses for factory built walls.

3. Interpret framing diagrams on construction drawings.

Learning Objectives

Identify special notes within construction drawings.
Identify common building symbols.

4. Select the appropriate tools and equipment needed to build and frame walls.

Learning Objectives

Identify appropriate use of framing nailer.
Identify appropriate use of crown stapler.

5. Discuss wood types used in construction.

Learning Objectives

Compare characteristics and uses of treated and untreated lumber.
Compare characteristics and uses of interior and exterior lumber.

6. Lay out floor trusses.

Learning Objectives

Identify spacing on floor plan.
Identify placement of plumbing walls.

7. Lay out floor joists.

Learning Objectives

Identify spacing of floor joists.
Identify placement of plumbing walls.

8. Lay out wall framing.

Learning Objectives

Interpret dimensions on construction drawings.
Confirm measurements on construction drawings.

9. Assemble floor trusses.

Learning Objectives

Identify the order in which floor trusses are assembled.
Prepare tools and equipment for assembly.

10. Build floor joists.

Learning Objectives

Identify the dimensions of lumber to use.
Identify the direction of the crown.

11. Build wall frames.

Learning Objectives

Prepare tools and equipment for use.
Identify dimensions of walls.
Determine the appropriate use of engineered walls.

12. Demonstrate appropriate safety procedures.

Learning Objectives

Identify appropriate personal protective equipment.
Demonstrate proper tool use and handling.

13. Compare fasteners used in construction.

Learning Objectives

Identify types of nails.
Identify types of screws.

14. Interpret building code requirements.

Learning Objectives

Identify building codes on construction drawings.
Describe common code requirements.

15. Compare methods for standing exterior walls.**Learning Objectives**

List common procedures for standing exterior walls.
Determine appropriate standing method for appropriate situations.

SCC Accessibility Statement

South Central College strives to make all learning experiences as accessible as possible. If you have a disability and need accommodations for access to this class, contact the Academic Support Center to request and discuss accommodations. North Mankato: Room E-112, (507) 389-7222; Faribault: Room A-116, (507) 332-5847.

Additional information and forms can be found at www.southcentral.edu/disability.

This material can be made available in alternative formats by contacting the Academic Support Center at 507-389-7222.