



South Central College

CARP 1123 Residential Principles I

Course Outcome Summary

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. Interpret floor plans for a project.**
Learning Objectives
Identify floor plan symbols.
Explain dimensioning floor plans.
- 2. Construct walls as a project starting point.**
Learning Objectives

Identify appropriate wall needs.
Build bearing walls and knee walls as applicable.

3. Explain floor systems, installation, and processes.

Learning Objectives

Identify a variety of different floor systems.
Discuss procedures for laying floors.
Demonstrate floor system layout.

4. Develop a floor system plan.

Learning Objectives

Identify needs of the specific project.
Locate plumbing fixtures and plan layout accordingly.

5. Create floor support system.

Learning Objectives

Identify necessary support components.
Acquire support components and plan the steps.
Install the floor system.

6. Explore subfloor systems and materials.

Learning Objectives

Determine floor system spacing for sheet layout.
Demonstrate floor joist spacing and layout.
Demonstrate best use of subfloor material for layout.

7. Construct structural elements for floors.

Learning Objectives

Build well openings as applicable.
Explain use of floor plywood.

8. Perform detail work on floor system.

Learning Objectives

Apply sill seals.
Install sill plates and rim boards.

9. Engage in preparation for wall construction.

Learning Objectives

Identify wall parts.
Layout walls.
Discuss variations in plans.

10. Develop a plan and a schedule for wall construction.

Learning Objectives

Identify necessary supplies for wall construction.
Layout wall construction steps.

11. Execute wall construction process.

Learning Objectives

Erect walls.
Brace walls.

12. Prepare house for siding.

Learning Objectives

Apply house wrap.
Tape seams.

13. Demonstrate application of exterior wall coverings.

Learning Objectives

Identify a variety of exterior covers.
Sheath exterior walls.

14. Apply building code and zoning regulations.**Learning Objectives**

Explain terms associated with building codes and zoning regulations.
Describe national standard building codes.
Identify the use of residential and commercial codes.
List the major components in an inspection.
Identify basic information required to obtain a building permit.

15. Demonstrate job site safety.**Learning Objectives**

Identify saw horses and explore their role in safety.
Explain use of safety belts and nets on a job site.
Demonstrate tying off hitches and knots.

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 B-132, (507) 389-7222; Faribault: Room A-116, (507) 332-7222.

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

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