



South Central College

CARP 1225 Stairway Technology

Common Course Outline

Course Information

Description This course covers all the aspects of stairway installation in residential construction. Students will learn the many code requirements involved with stairways. Students will layout, cut, and install a set of stairs. Stairs will also be constructed on the class residential building project. These stairways may be installed in the residence, off decks, or in the main entry. Skirt board, treads, risers, and handrails will be installed to finish a stairway to meet code requirements. (Prerequisites: CARP 1110; CARP 1121)

Total Credits 3
Total Hours 80

Types of Instruction

Instruction Type	Credits/Hours
Lecture	1/16
Lab	2/64

Pre/Corequisites

CARP 1110 Carpentry Tools and Safety
CARP 1121 Print Reading
CARP 2023 Advanced Principles I

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 Outcomes

1. Identify components of basic stair design.

Learning Objectives

Compare stair design and styles.
Define basic terminology in regards to stair design.

2. Perform necessary stairway calculations.

Learning Objectives

Recognize basic math equations.
Identify building codes to determine specifications of stairs.

3. Compare the different types of stair railings.

Learning Objectives

List types of stair railings.
List types of spindles used in stairway construction.

4. Compare the materials used in stair construction.

Learning Objectives

Identify types of hardwoods used in stairway construction.
List characteristics of hardwoods used in stairway construction.

5. Describe code requirements related to stairway construction.

Learning Objectives

Explain purpose of stairway construction code requirements.
Identify potential risks associated with stairway construction.

6. Demonstrate safe construction practices.

Learning Objectives

Identify appropriate personal protective equipment.
Demonstrate safe tool use.

7. Identify different installation methods for newel posts and mountings.

Learning Objectives

Demonstrate key lock system.
Demonstrate installation through subfloor into floor joist.

8. Identify appropriate tools for stair build.

Learning Objectives

Demonstrate proper use of stairway gauges.
Demonstrate proper use of two foot square.
Demonstrate proper use of skill saw and sawzall when cutting stairway stringers.

9. Identify risks of different stairway finishes.

Learning Objectives

Determine products prone to causing slips and falls.
Determine products that can prevent slips and falls.

SCC Accessibility Statement

Disability Services provides accommodations and other supports to students with permanent and temporary disabilities that affect their SCC experience. Disabilities may include mental health (anxiety, depression, PTSD), ADHD, learning disabilities, chronic health conditions (migraine, fibromyalgia), sensory disabilities, and temporary disabilities (broken arm, surgery). Common accommodations are extended test time, private room for testing, audiobooks, and sign language interpreter.

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