

SOUTHEAST COMMUNITY COLLEGE
ADVANCED TECHNOLOGIES & SKILLED TRADES DIVISION
Building Construction Technology Program
Revision Date: November 2025

I. CATALOG DESCRIPTION

Course Number: CNST1460
Course Title: Rough Carpentry
Prerequisite(s):
Catalog Description: This course provides an introduction to the fundamentals of rough carpentry, emphasizing essential skills for framing. Students will develop proficiency in using a variety of carpentry tools and techniques to construct foundational structures, such as floors, walls, and roof framing. Key topics include accurate measuring and cutting, blueprint reading, knowledge of building codes, and adherence to safety protocols within a construction environment.
Credit Hours: 3.5
Class Hours: 30
Lab Hours: 68
Total Contact Hours: 98

II. COURSE OBJECTIVES: *Course will:*

- A. Describe specifications and construction drawings that specify floor system requirements.
- B. Identify the types of floor framing systems.
- C. Identify floor system components and required material quantities.
- D. Describe how to construct a platform floor assembly.
- E. Identify the components of a wall system and describe how to estimate needed framing materials
- F. Summarize the steps for laying out and framing walls.
- G. Summarize the procedures for assembling and erecting wall systems.
- H. Identify and install ceiling frame components.
- I. Identify common residential roof types and related components.
- J. Describe the methods used to lay out and cut common rafters.
- K. Explain how to erect and sheath a gable roof.
- L. Recognize the use of trusses in basic roof framing.
- M. Identify stairway components and related requirements.
- N. Describe how to determine the total rise, number and size of risers, and number and size of treads needed for a stairway.
- O. Demonstrate the procedure for constructing stairs.

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES:

- A. Student Learning Outcomes: *Student will be able to:*
 - 1. Layout and construct a floor assembly.
 - 2. Layout a wood frame wall, including plates, corner assemblies, door and window openings, partitions, and bracing.
 - 3. Layout a wood frame wall, including plates, corner assemblies, door and window openings, partitions, and bracing.
 - 4. Layout common roof rafters.
 - 5. Cut and install roof rafters for a gable roof.
 - 6. Frame a gable end wall.

7. Calculate the total rise, number and size of risers, and number and size of treads required for a stairway.
8. Layout and cut a stair stringer.
- B. General Education Learning Outcomes (GELOs)
 1. GELO #3: Critical Thinking & Problem Solving
Outcome 2: Synthesize information to arrive at reasoned solutions to problems.

IV. CONTENT/TOPICAL OUTLINE *(course outline may provide more detailed information)*

- A. Introduction to floor systems
- B. Introduction to wall systems
- C. Introduction to roof systems
- D. Introduction to basic stair layout

V. INSTRUCTIONAL MATERIALS

The Course Information Document lists the current text(s) required for this class. The list is also available in the campus bookstore. The Course Information Document also lists the tools/equipment or other supplies required for this class.

VI. METHODS OF PRESENTATION/INSTRUCTION

- A. Methods of presentation typically include a combination of the following:
 1. Lecture
 2. Classroom and Lab demonstration
 3. Classroom discussion and Lab assistance/discussion
 4. Video presentation
 5. PowerPoint presentations
 6. Speaker(s)
 7. Field Trip(s)
 8. Instructional handouts

VII. METHODS OF EVALUATION

- A. Methods of evaluation, although determined by the individual instructor, traditionally includes a combination of the following:
 1. Assignments
 - a. Due dates are provided with assignment
 - b. Complete projects on time
 - c. Points are deducted if a project is late
 2. Cutting Material for Minimal Waste
 3. Workmanship and Self Discipline
 4. Safety Practices

VIII. SPECIFIC COURSE REQUIREMENTS

- A. Student must meet all of the following to receive a passing grade:
 1. Achieve a passing grade of "C" (70%) or higher, based on SCC grading scale.
 2. Submit own work. Students turning in homework, reports, field notes, or calculations by someone other than themselves will receive 0% and be referred to the Division Dean and Dean of Students for further disciplinary action. Consequences can include failing the course.
 3. Demonstrate attitude, skills, and character commensurate with industry standards.

4. All program policies of the Building Construction Technology program will be strictly enforced.
5. Intentional damage to college property will not be tolerated and may result in punitive action, such as being removed from the program.
6. All cell phones will be turned off during class/lab time. If this becomes a problem, the instructor may consider the delinquent student absent.