

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

I. CATALOG DESCRIPTION

Course Number: CNST1100
Course Title: Basic Carpentry
Prerequisite(s): None
Catalog Description: Introduction to care, use and maintenance of hand tools, and portable and stationary lab equipment used in construction. Review basic math skills used for Basic Carpentry. Introduction to Residential Blueprint Reading. Become aware of what is needed to maintain a safe job-site. Introduction to construction methods, materials and concepts used in residential and light commercial construction.
Credit Hours: 3
Class Hours: 38
Lab Hours: 23
Total Contact Hours: 61

II. COURSE OBJECTIVES: *Course will:*

- A. Introduce use and maintenance of hand tools and portable lab equipment.
- B. Introduce math skills related to basic carpentry.
- C. Introduce construction methods, materials and concepts used in residential and commercial construction.

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES:

- A. Student Learning Outcomes: *Student will be able to:*
 - 1. Utilize basic math skills common to the carpentry trades.
 - 2. Identify, use and operate various tools and equipment common to the construction trades.
 - 3. Demonstrate an understanding of machine tool maintenance.
 - 4. Demonstrate an understanding of wood technology as it applies to construction.
 - 5. Model usage and application of required building products.
 - 6. Interpret current residential construction building codes, methods and sequences.
 - 7. Apply carpentry theory for residential and light commercial construction.
- B. General Education Learning Outcomes (GELOs)
 - 1. GELO #3: Critical Thinking & Problem Solving
Outcome 1: Collect, identify, interpret and analyze data.

IV. CONTENT/TOPICAL OUTLINE

- A. Basic Math
- B. Hand Tools
- C. Power Tools & Maintenance
- D. Wood and Engineered Wood
- E. Fasteners
- F. Blueprint Reading, Drawing & Codes
- G. Basic Floor Framing
- H. Basic Wall & Ceiling Framing
- I. Safety & Job-Site Working Conditions
- J. Basic Roof Framing-Common Rafters

V. INSTRUCTIONAL MATERIALS

- A. Required Text(s): Vogt, Floyd, Residential Construction Academy - *Carpentry*
- B. Other Resources: Calculator (recommend Construction Master)
- C. Supplies: 3-Ring Notebook for instructor handouts and a variety of woodworking hand tools

VI. METHODS OF PRESENTATION/INSTRUCTION

- A. Methods of presentation typically include a combination of the following:
 - 1. Lecture
 - 2. Classroom demonstration
 - 3. Video & computer presentations
 - 4. PowerPoint presentations
 - 5. Instructional handouts
 - 6. Lab projects and activities

VII. METHODS OF EVALUATION

- A. Methods of evaluation, although determined by the individual instructor, traditionally includes a combination of the following:
 - 1. Written assignments and projects.
 - 2. Laboratory performance.

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. Demonstrate attitude, skills, and character appropriate with industry standards.