SOUTHEAST COMMUNITY COLLEGE
CONSTRUCTION MANUFACTURING AND TECHNOLOGY DIVISION
Building Construction Technology Program
Revision Date: August 22, 2022

I. CATALOG DESCRIPTION

Course Number:	CNST1450
Course Title:	Advanced Construction Processes and Practices
Prerequisite(s):	CNST1224
Catalog Description:	Fundamentals and application of carpentry, emphasizing the process of home building through the study of blueprints and construction texts and references. Framing, roofing, exterior trim, interior trim.
Credit Hours:	3.5
Class Hours:	22
Lab Hours:	92
Total Contact Hours:	114

II. COURSE OBJECTIVES: *Course will:*

A. Demonstrate floor framing
B. Examine wall construction
C. Demonstrate roof framing
D. Demonstrate stairway construction
E. Describe interior trim and millwork

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES:

A. Student Learning Outcomes: *Student will be able to:*
- **1.** Build a scaled down mock-up of a hip roof, including the laying out and cutting of the common hip, hip and valley jacks, and saddle rafters.
- **2.** Calculate floor to floor measurements using the IRC code requirements to figure correct riser and runs for stairs, layout and cut stair stringers.
- **3.** Layout and build wall section as directed by instructor.

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 construction
B. Introduction to wall construction
C. Introduction to roof construction
D. Introduction to stairway construction
E. Introduction to interior trim and millwork

V. INSTRUCTIONAL MATERIALS

A. Required Text(s):
- **1.** Voght, *Carpentry,* (Refer to CID and/or instructor for current edition)
- **2.** Mussell, Barry D, *The Roof Framers Bible* (Refer to CID and/or instructor for current edition)

B. Supplies/Tools Required by the Building Construction Program:
- **1.** 16 oz plumb hammer
- **2.** Stanley combination square

3. Stanley framing square
4. Coping saw
5. Stanley block plane
6. Stanley wood chisels
7. Large oil stone
8. Nail sets
9. Stanley putty knife
10. Stanley utility knife
11. Chalk box
12. Compass scribe
13. Pliers
14. Sliding T-bevel
15. Stanley steel tape
16. #1 and #2 Phillips screwdrivers
17. Straight blade screwdriver
18. Nail apron
19. Drill bit index
20. 3/8" cordless drill
21. Wonder bar
22. Cats paw
23. Sanding block
24. #5 and #9 vix bits
25. 24" carpenter's level
26. 26" handsaw

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.