

SOUTHEAST COMMUNITY COLLEGE
CONSTRUCTION MANUFACTURING AND TECHNOLOGY DIVISION
Building Construction Technology Program
Revision Date: August 26, 2019

I. CATALOG DESCRIPTION

Course Number: CNST1226
Course Title: Construction Tools and Materials I
Prerequisite(s): None
Catalog Description: Introduction to care, use, and maintenance of hand tools, portable power, and stationary lab equipment. New construction methods, materials, and concepts. Origin, manufacturing processes, characteristics, and application of materials used in residential and light commercial construction today.

Credit Hours: 1.5
Class Hours: 23
Lab Hours: 0
Total Contact Hours: 23

II. COURSE OBJECTIVES: *Course will:*

- A. Become acquainted with the codes and tables of the International Residential Code (IRC).
- B. Demonstrate current residential construction methods and sequences.
- C. Identify various tools and materials common to the construction trades.
- D. Discuss carpentry theory for residential and light commercial construction.
- E. Describe usage and application of required building products.
- F. Identify wood technology as it applies to construction.
- G. Become acquainted with construction technology from a variety of publications.

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES:

- A. Student Learning Outcomes: *Student will be able to:*
 - 1. Develop a home construction procedure and technique.
 - 2. Recognize a range of tools common to the construction trades.
 - 3. Interpret construction know-how from reading resources.
- 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 (*course outline may provide more detailed information*)

- A. Hand Tools
- B. Portable Power Tools
- C. Stationary Power Tools
- D. Wood Lumber and Panels
- E. Fasteners

V. INSTRUCTIONAL MATERIALS

- A. Required Text(s):
 - 1. Vogt, Floyd, *Carpentry*, (Refer to CID and/or instructor for current edition)
 - 2. IRC, *Fundamentals of Dwelling Construction*, (Refer to CID and/or instructor for current edition)
- B. Supplies: Calculator, 3-ring notebook and *City of Lincoln Pocket Framing Guide*

VI. METHODS OF PRESENTATION/INSTRUCTION

- A.** Methods of presentation typically include a combination of the following:
 - 1. Lecture
 - 2. Classroom demonstration
 - 3. Classroom discussion
 - 4. Video presentations
 - 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 assignments.
 - b. Complete assignments on time.
 - c. Points are deducted if an assignment is late.
 - 2. Tests (50-100 points each)
 - 3. Quizzes (10-30 points each)
 - 4. Worksheets (10-30 points each)
 - 5. Construction-Related News Articles Summarizes (± 100 total points)

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.