

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

I. CATALOG DESCRIPTION

Course Number: CNST1101
Course Title: Basic Woods Manufacturing
Prerequisite(s): None
Catalog Description: Introduction to woods manufacturing curriculum, lab maintenance, construction curriculum, and instructional practice for students in the 2 + 2 SCC UNL program.
Credit Hours: 3
Class Hours: 30
Lab Hours: 45
Total Contact Hours: 75

II. COURSE OBJECTIVES: *Course will:*

- A. Introduce the student to effective methods of preparing and maintaining a classroom environment conducive to learning.
- B. Introduce the student to successful strategies that create a safe and inclusive environment.
- C. Introduce the student to the types of manufacturing, set-up and operation.
- D. Allow students to perform manufacturing processes.
- E. Introduce the student to approaches that implement routines and procedures for the effective management of materials, supplies, equipment and technology.
- F. Introduce the student to current residential construction methods, sequences and career opportunities.

III. STUDENT LEARNING OUTCOMES AND GENERAL EDUCATION LEARNING OUTCOMES:

- A. Student Learning Outcomes: *Student will be able to:*
 - 1. Execute safe operation of high school woods manufacturing equipment.
 - 2. Model the proper setup and operation of various woods manufacturing equipment.
 - 3. Create a project that would be comparable to a high school entry level project.
 - 4. Show the proper maintenance and upkeep for a high school woods manufacturing lab.
 - 5. Demonstrate to high school students a woods manufacturing process.
- 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. Classroom Management
 - 1. Effective classroom management
 - 2. Creating a motivating, personalized learning environment
 - 3. Dealing with inappropriate behavior
 - 4. Supporting student success
- B. Planning for Safety in the high school lab

1. Lesson plans focused on essential objectives
2. Modeling general lab safety
3. Safe hand and power tool use
4. Managing lab operation safely
- C. Manufacturing, process, set up and operation
 1. Types of manufacturing/career awareness
 2. Planer
 3. Jointer
 4. Table saw
 5. CNC basics
- D. Demonstration of a manufacturing process
 1. Problem solving/planning
 2. Machine use
 3. Squaring material
 4. Basic joinery
 5. Fasteners
 6. Adhesives
 7. Preparation for finish
 8. Assembly
 9. Finish
 10. Student assessment both formative and summative
- E. Maintenance of a high school lab
 1. Monthly maintenance check list
 2. Daily safety checks
 3. End of the week maintenance
 4. Strategies to involve students
- F. Construction
 1. Types of construction/career awareness
 2. Basic framing
 3. Basic exterior finish
 4. Basic interior finish

V. INSTRUCTIONAL MATERIALS

- A. Required Text(s): Refer to CID and/or course instructor for required text(s).
- B. Other Resources:
 1. Supplemental handouts supplied by instructor
 2. Notebook
 3. Tools/supplies as assigned by instructor

VI. METHODS OF PRESENTATION/INSTRUCTION

- A. Methods of presentation typically include a combination of the following:
 1. Lecturing
 2. Video Presentations
 3. Laboratory Demonstrations

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.** Successful completion of all assignments, projects and demonstrations.
- B.** Minimum course grade of C (70%) is required.