COURSE INFORMATION

Course prefix/No.: **BCT 106**
Course Title: **Beginning Woodworking**
Lecture Hours/Week: **1.0**
Lab Hours/Week: **3.0**
Credit Hours/Semester **2.0**

Distance Learning Attendance/VA Statement
Textbook Information

COURSE DESCRIPTION

This course is an introduction to woodworking. The student will have hands-on use of hand and power tools such as table saw, jig saw, circular saw, router, joiner, and radial arm saw to complete projects assigned by the instructor.

COURSE COMPETENCIES

Upon successful completion of this course, the student should be able to:

Module 1 - Power Tools

- State and follow general safety rules for operating power tools.
- Demonstrate proper use of:
  - Circular saws
  - Saber saws
  - Reciprocating saws
  - Drills
  - Screwdrivers
  - Routers
  - Sanders
  - Staplers
  - Nailers
  - Power-actuated drivers
- Properly make necessary adjustments to the table saw and power miter saw.
- Safely cut lumber to length, rip to width, and make miters using the table saw.
- Safely cut lumber to length, rip to width, and make miters using the power miter saw.

Module 2 - Wood and Wood Products

- Define softwood and hardwood and name examples of each type.
- State the grades and sizes of lumber.
- Compute linear foot, square foot and board foot measures.

- Describe the composition, grades, and uses for plywood, OSB, particleboard, and fiberboards.
- Give the meanings of the codes of the APA rating stamp on plywood, OSB, particleboard, and fiberboards.
- Describe and give typical sizes and specific uses for Laminated Veneer Lumber (LVL).
- Describe and give typical sizes and specific uses for Parallel Strand Lumber (PSL).
- Describe and give typical sizes and specific uses for Laminated Strand Lumber (LSL).
- Describe and give typical sizes and specific uses for Wood I-Beams.
- Describe and give typical sizes and specific uses for Glue-laminated lumber**.**

Module 3 - Fasteners

- Identify and give sizes and specific uses for box nails, finish nails, casing nails, duplex nails, roofing nails and masonry nails.
- Demonstrate the proper way to fasten materials together with nails.
- Identify and give sizes and specific uses for wood screws, sheet metal screws, and lag screws.
- Identify and give sizes and specific uses carriage bolts, machine bolts, and stove bolts.
- Name applications for heavy duty, medium duty and light duty anchors.
- Demonstrate correct technique to install self drilling anchors, sleeve anchors, and split fast anchors.
- Demonstrate correct technique to install toggle bolts, plastic toggles, molly screws, conical screws, and universal plugs.
- Demonstrate correct technique to use framing anchors to join parts of a wood frame.
- Demonstrate correct technique to install anchors, anchor bolts and holdowns to connect frame members to concrete.
- Discuss adhesives used in construction and select the appropriate ones to use for floor framing, applying panels and installing vinyl floor tiles and ceramic wall tiles.

Module 4 - Application: Woodworking Project

- Describe and explain the function of the various kinds of drawings contained in a woodworking plan.
- Explain basic architectural and building symbols on plan drawing.
- Determine dimensions from a scale drawing.
- Estimate types and quantities of materials needed for a specific woodworking project.
- Estimate cost of materials for a specific project.
- Properly measure and mark necessary lumber for cutting.

- Demonstrate proper techniques for cutting materials.
- Select appropriate tools and fasteners to assemble the project to meet specifications of the project plan.

REQUIREMENTS

Attendance Policy
The college attendance policy stated in the college handbook will be honored. The instructor will provide specific requirements for the course.

Academic Honesty
Students are expected to adhere to the college policy regarding student conduct as stated in the college handbook.

Assignments
Students are expected to complete all assignments and any supplementary exercises designated by the instructor.

EVALUATION STRATEGIES/GRADING

Students must complete all modules, including assignments, projects, labs, and tests. Students must earn at least a "C" in order for the course to serve as a prerequisite and for the course to apply towards a certificate.

Grading Scale

A = 90-100
B = 80-89
C = 70-79
D = 60-69
F = 0-59

Evaluation Method

Tests/Projects (minimum of four total)	50% of each Module
Work Attitude	25% of each Module
Lab	25% of each Module

25% X 4 module grades = 100% Final Grade

***Work Attitude is defined as:**

- Participation
- Cooperation
- Appearance
- Effort
- Safety
- Responsibility
- Professionalism
- Attendance
- Self Motivation
- Works Independently

ENTRY LEVEL SKILLS

The student must be able to read and solve basic mathematical equations.

PREREQUISITES

RDG 031 or equivalent, BCT 105, BCT 112

CO-REQUISITES

None

METHODS OF INSTRUCTION

Lectures, reading assignments, projects, discussions, video presentations, multimedia presentations, and web content are the major teaching methods used in this course. See instructor for specifics.

LAB EXERCISES

See addendum or instructor for additional details.

Disability Statement: Any student who feels s/he may need an accommodation based on the impact of a disability should contact the Special Resources Office (SRO) at 803-327-8007 in the 300 area of Student Services. The SRO coordinates reasonable accommodations for students with documented disabilities.

Effective: SP2006