**BARTON COMMUNITY COLLEGE**

**COURSE SYLLABUS**

# **GENERAL COURSE INFORMATION**

Course Number: CRPT 1001

Course Title: Carpentry Basics

Credit Hours: 4

Prerequisite: CRFT 1001 Introductory Craft Skills

Division/Discipline: Workforce Training and Community Education/Carpentry

Course Description: This course provides training for the construction of a residential home. Instruction will include construction details such as: layout, materials, assembly, tool and equipment operation, and reasons for alternative methods of construction. Foundation layout and framework, leveling instruments, floor and wall framing methods, roof framing, covering and exterior finish, the study of the framing square, building materials and remodeling projects are also covered.

# **INSTRUCTOR INFORMATION**

# **COLLEGE POLICIES**

Students and faculty of Barton Community College constitute a special community engaged in the process of education. The College assumes that its students and faculty will demonstrate a code of personal honor that is based upon courtesy, integrity, common sense, and respect for others both within and outside the classroom.

Plagiarism on any academic endeavors at Barton Community College will not be tolerated. The student is responsible for learning the rules of, and avoiding instances of, intentional or unintentional plagiarism. Information about academic integrity is located in the Student Handbook.

The College reserves the right to suspend a student for conduct that is determined to be detrimental to the College educational endeavors as outlined in the College Catalog, Student Handbook, and College Policy & Procedure Manual. (Most up-to-date documents are available on the College webpage).

Any student seeking an accommodation under the provisions of the Americans with Disability Act (ADA) is to notify Student Support Services via email at [disabilityservices@bartonccc.edu](mailto:disabilityservices@bartonccc.edu).

# **COURSE AS VIEWED IN THE TOTAL CURRICULUM**

This course is intended to prepare entry level employees or train incumbent workers in the carpentry/construction industry to perform identified job tasks to comply with federal regulations and industry standards. The course includes practical and classroom training. Upon successful completion of the course participants will be prepared to demonstrate identified skills to employers for qualification purposes.

# **ASSESSMENT OF STUDENT LEARNING**

Barton Community College is committed to the assessment of student learning and to quality education. Assessment activities provide a means to develop an understanding of how students learn, what they know, and what they can do with their knowledge. Results from these various activities guide Barton, as a learning college, in finding ways to improve student learning.

Course Outcomes, Competencies, and Supplemental Competencies:

1. Demonstrate knowledge of the carpentry trade.
   1. Describe the history of the carpentry trade.
   2. Identify the aptitudes, behaviors, and skills needed to be a successful carpenter.
   3. Identify the training, career and entrepreneurial opportunities within the carpentry trade.
   4. Identify the responsibilities of a person working in the construction industry.
   5. State the personal characteristics of a professional.
   6. Explain the importance of safety in the construction industry.
2. Explain the use and variety of building materials, fasteners, and adhesives.
   1. Identify various types of building materials and their uses.
   2. State the uses of various types of hardwoods and softwoods.
   3. Identify the different grades and markings of wood building materials.
   4. Identify the safety precautions associated with building materials.
   5. Describe the proper method of storing and handling building materials.
   6. State the uses of various types of engineered lumber.
   7. Calculate the quantities of lumber and wood products using industry‐standard methods.
   8. Describe the fasteners, anchors, and adhesives used in construction work and explain their uses.
3. Demonstrate the proper use of hand and power tools.
   1. Identify the hand tools commonly used by carpenters and describe their uses.
   2. Use various hand tools in a safe and appropriate manner including, levels, squares planes, clamps, and saws.
   3. State the general safety rules for operating all power tools, regardless of type such as drill presses and power metal shears.
   4. State the general rules for properly maintaining all power tools, regardless of type.
   5. Identify the portable power tools commonly used by carpenters and describe their uses.
   6. Use portable power tools in a safe and appropriate manner including the following: circular saw, portable table saw, compound miter saw, frame and trim saw, router/laminate trimmer, portable power plane, and Pneumatic nailer/stapler.
4. Demonstrate the proper reading of plans and elevations.
   1. Read and interpret site/plot plans.
   2. Describe the types of drawings usually included in a set of plans and list the information found on each type.
   3. Interpret selected symbols and abbreviations used on drawings.
   4. Identify the different types of lines used on construction drawings.
   5. Identify selected architectural symbols commonly used to represent materials on plans.
   6. Identify selected electrical, mechanical, and plumbing symbols commonly used on plans.
   7. Identify selected abbreviations commonly used on plans.
   8. Read and interpret plans, elevations, schedules, sections, and details contained in basic construction drawings.
   9. Read and interpret foundation, floor, and other plan view drawings.
   10. Read and interpret elevation view drawings.
   11. Read and interpret section and detail drawings.
   12. Read and interpret schedules.
   13. Read and interpret written specifications.
   14. State the purpose of written specifications.
   15. Identify and describe the parts of a specification.
   16. Perform a quantity takeoff for materials.
   17. Demonstrate or describe how to perform a quantity takeoff for materials.
5. **INSTRUCTOR'S EXPECTATIONS OF STUDENTS IN CLASS**

# **TEXTBOOKS AND OTHER REQUIRED MATERIALS**

# **REFERENCES**

# **METHODS OF INSTRUCTION AND EVALUATION**

# **ATTENDANCE REQUIREMENTS**

1. **COURSE OUTLINE**