**BARTON COMMUNITY COLLEGE**

**COURSE SYLLABUS**

# **GENERAL COURSE INFORMATION**

Course Number: CRPT 1010

Course Title: Floors Walls Ceiling Framing

Credit Hours: 4

Prerequisite: CRPT 1001 Carpentry Basics

Division/Discipline: Workforce Training and Community Education/Carpentry

Course Description: This course covers framing basics and procedures for layout of floor joists, sub-floor, and walls. In addition, wall components and assembly, ceiling construction, straightening, waterproofing, and the appropriate building codes will be covered.

1. **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 the proper construction of various floor systems
   1. Lay out and construct a floor assembly.
   2. Identify the different types of framing systems.
   3. Identify floor and sill framing and support members.
   4. Name the methods used to fasten sills to the foundation.
   5. Install bridging.
   6. List and recognize different types of bridging.
   7. Install joists for a cantilever floor.
   8. Match selected fasteners used in floor framing to their correct uses.
   9. Install a subfloor using butt‐joint plywood/OSB panels.
   10. Explain the purposes of subflooring and underlayment.
   11. Install a single floor system using tongue‐and‐groove plywood/OSB panels.
   12. List and recognize different types of flooring materials.
   13. Estimate the amount of material needed to frame a floor assembly.
   14. Read and interpret drawings and specifications to determine floor system requirements.
   15. Given specific floor load and span data, select the proper girder/beam and joist size from a list of available girders/beams/joists.
   16. List and recognize different types of floor joists.
2. Demonstrate the proper construction of wall and ceiling framing
   1. Lay out, assemble, erect, and brace exterior walls.
   2. Describe the procedure for laying out a wood frame wall, including plates, corner posts, door and window openings, partition Ts, bracing, and firestops.
   3. Describe the correct procedure for assembling and erecting an exterior wall.
   4. Describe wall framing techniques used in masonry construction.
   5. Explain the use of metal studs in wall framing.
   6. Cut and install ceiling joists on a wood frame building.
   7. Describe the correct procedure for laying out ceiling joists.
   8. Estimate the materials required to frame walls and ceilings.
   9. Identify the components of a wall and ceiling layout.
   10. Identify the common materials and methods used for installing sheathing on walls.
3. Demonstrate the proper construction ofconcrete, reinforcing materials, and forms.
   1. Perform volume estimates for concrete quantity requirements.
   2. Identify the properties of cement.
   3. Describe the composition of concrete.
   4. Identify types of concrete reinforcement materials and describe their uses.
   5. Identify various types of footings and explain their uses.
   6. Identify the parts of various types of forms.
   7. Construct a simple concrete form with reinforcement.
   8. Explain the safety procedures associated with the construction and use of concrete forms.
   9. Erect, plumb, and brace a simple concrete form with reinforcement.
4. **INSTRUCTOR'S EXPECTATIONS OF STUDENTS IN CLASS**

# **TEXTBOOKS AND OTHER REQUIRED MATERIALS**

# **REFERENCES**

# **METHODS OF INSTRUCTION AND EVALUATION**

# **ATTENDANCE REQUIREMENTS**

1. **COURSE OUTLINE**