**BARTON COMMUNITY COLLEGE**

**COURSE SYLLABUS**

# **GENERAL COURSE INFORMATION**

Course Number: CRFT 1001

Course Title: Introductory Craft Skills

Credit Hours: 3

Prerequisite: None

Division/Discipline: Workforce Training and Community Education/Industrial Technology

Course Description: This course introduces students to the construction trades. The course covers safety, construction math, hand tools, power tools, blueprint reading, rigging, communication skills, and employability skills.

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/plumbing trades 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.

# **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. Identify and describe the various types of hazards in the workplace, basic safety, and procedures.
2. Explain the role that safety plays in the construction crafts.
3. Describe the meaning of job‐site safety.
4. Describe the characteristics of a competent person and a qualified person.
5. Explain the appropriate safety precautions to take around common job‐site hazards.
6. Demonstrate the use and care of appropriate personal protective equipment (PPE).
7. Properly don and remove personal protective equipment (safety goggles, hard hat, and personal fall protection).
8. Follow the safety procedures required for lifting heavy objects.
9. Describe safe behavior on and around ladders and scaffolds.
10. Explain the importance of Hazard Communications (HazCom) and material safety data sheets (MSDSs).
11. Describe fire prevention and firefighting techniques.
12. Define safe work procedures to use around electrical hazards.
13. Demonstrate knowledge of the math related to construction.
14. Add, subtract, multiply, and divide whole numbers, with and without a calculator.
15. Use a standard ruler and a metric ruler to measure.
16. Add, subtract, multiply, and divide fractions.
17. Add, subtract, multiply, and divide decimals, with and without a calculator.
18. Convert decimals to percentages and percentages to decimals.
19. Convert fractions to decimals and decimals to fractions.
20. Explain what the metric system is and how it is important in the construction trade.
21. Recognize and use metric units of length, weight, volume, and temperature.
22. Recognize some of the basic shapes used in the construction industry, and apply basic geometry to measure them.
23. Identify and describe the types of hand and power tools used in the trades.
24. Recognize and identify some of the basic hand tools used in the construction trade.
25. Use hand tools safely.
26. Describe the basic procedures for taking care of hand tools.
27. Identify, describe and perform specific uses of power tools.
28. Identify power tools commonly used in the construction trades.
29. Use power tools safely.
30. Explain how to maintain power tools properly.
31. Identify types and uses of construction drawings.
32. Recognize and identify basic blueprint terms, components, and symbols.
33. Relate information on blueprints to actual locations on the print.
34. Recognize different classifications of drawings.
35. Interpret and use drawing dimensions.
36. Identify and describe the types of basic rigging.
37. Identify and describe the use of slings and common rigging hardware.
38. Describe basic inspection techniques and rejection criteria used for slings and hardware.
39. Describe basic hitch configurations and their proper connections.
40. Describe basic load‐handling safety practices.
41. Demonstrate proper use of American National Standards Institute (ANSI) hand signals.
42. Demonstrate proper basic communication skills.
43. Demonstrate the ability to interpret information and instructions presented in both written and verbal form.
44. Demonstrate the ability to communicate effectively in on‐the‐job situations using written and verbal skills.
45. Identify and develop basic employability Skills.
46. Explain the construction industry, the role of the companies that make up the industry, and the role of individual professionals in the industry.
47. Demonstrate critical thinking skills and the ability to solve problems using those skills.
48. Demonstrate knowledge of computer systems and explain common uses for computers in the construction industry.
49. Demonstrate effective relationship skills with teammates and supervisors, the ability to work on a team, and appropriate leadership skills.
50. Recognize workplace issues such as sexual harassment, stress, and substance abuse.
51. **INSTRUCTOR'S EXPECTATIONS OF STUDENTS IN CLASS**

# **TEXTBOOKS AND OTHER REQUIRED MATERIALS**

# **REFERENCES**

# **METHODS OF INSTRUCTION AND EVALUATION**

# **ATTENDANCE REQUIREMENTS**

1. **COURSE OUTLINE**