

**Northwest Arkansas Community College**  
(Workforce Division)

**Discipline Code**

CST

**Course Number**

1323

**Course Title**

Introduction to Craft Skills

**Catalog Description**

Introduction to Craft Skills is taught with NCCER Core Curriculum and is a primer for all other NCCER Level 1 craft curriculum (plumbing, carpentry, electrical, welding, industrial maintenance, etc.). Students will learn topics such as Basic Safety, Construction Math, Communication Skills and Introduction to Construction Drawings. Likewise, all students will complete performance profiles demonstrating applied practice and mastery of those concepts. Completing this curriculum gives the trainee the basic skills needed to continue education in any craft area he or she chooses. The program can also be helpful to the 'home mechanic' who wants to practice basic safety when conducting home maintenance, learn to use hand and power tools properly, and read basic schematics and drawings.

**Prerequisites**

None

**Credit Hours**

3 credit hours

**Contact hours**

45 lecture/lab contact hours

**Load hours**

3 load hours

**Semesters Offered**

Fall, Spring & Summer

**ACTS Equivalent**

N/A

## **Grade Mode**

A-F

## **Learning Outcomes**

Upon completing this course, the student should be able to:

- Cite the safety obligations of workers, supervisors, and managers. Demonstrate safe work procedures, proper use of personal protective equipment, and how to safely work with hazardous chemicals.
- Apply basic mathematical functions as it applies to the construction trades.
- Articulate the applications and proper use of hand tools used in construction. Demonstrate the importance of safety and maintenance of each hand tool.
- Explain the proper use, safety, and maintenance of a variety of power tools used in the construction trades.
- Recognize the basic terms for construction drawings, components, and symbols. Identify the types of plans in a set. Articulate how to interpret and use drawing dimensions.
- Recognize the principles of effective communication with co-workers and supervisors. Cite the importance of verbal and written communication and instructions on the job.
- Summarize critical thinking and problem solving skills. Explain effective relationship skills, self-presentation, and key workplace issues such as sexual harassment, stress and substance abuse.
- Recognize hazards associated with material handling and explain proper techniques and procedures. Identify material handling equipment and its use for common job-site tasks.
- Demonstrate the Design Thinking process to include hands-on application

## **General Education Outcomes Supported**

- Students develop higher order thinking skills.
- Students can achieve mathematical literacy.
- Students demonstrate information literacy.

## **Standard Practices**

### **Topics list**

- Basic Safety
- Introduction to Construction Math
- Introduction to Hand Tools
- Introduction to Power Tools

- Construction Drawings
- Basic Rigging (optional)
- Basic Communication Skills
- Basic Employability Skills
- Introduction to Materials Handling
- Introduction to Design Thinking

### **Learning activities**

- Courses must, at a minimum, cover the core learning outcomes for each topic. Faculty may add to these outcomes, but may not omit any of them.
- Lab safety and equipment orientation and enforcement of safety protocols is the responsibility of each faculty member.
- Laboratory exercises should average between 1-2 hours each week and include all applicable elements of the Introductory Craft Skills performance profiles. Proficiency with hand and power tools in a variety of applications must be safely demonstrated to satisfy the competencies outlined in each of the required performance profiles (demonstration of skill).
- Since all general education outcomes are supported by specific course and program outcomes, all instructors should include learning activities that develop these outcomes in their courses and identify them in course syllabi. Instructors should describe how these activities will be evaluated in their course syllabi and/or reflected in their gradebooks.

### **Assessments**

Exams include closed book test, online quizzes, and performance tasks as required within NCCER Introductory Craft Skills (Core) curricula. Also includes a written and hands-on project displaying the students understanding of Design Thinking principles.

### **Grading guidelines**

- 90% score of all graded assignments = A
- 80% - 89% score on all graded assignments = B
- 70% - 79% score on all graded assignments = C
- 60% - 69% score on all graded assignments = D
- <60% score on all graded assignments = F

**Revision Date** March 4, 2022