



CHC105 Introductory Craft Skills Syllabus

Course Information

Credits	3
Campus	Washburn Institute of Technology
Address	5724 SW Huntoon
City/State/Zip	Topeka, Kansas 66604
Main Office	785.670.2010
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Description

Introductory Craft Skills is required for all students entering the Construction trades or Cabinetry program. The intent of this course is to introduce the students to the construction trades. It is very important for every student to learn the proper way to conduct themselves while in the shop or on-the-job site. This course will cover shop and job site safety, tool safety, personal protective devices, protective railings, proper storage and handling of construction materials, and construction drawings. This course will follow the NCCER modules for: Basic Safety, Introduction to Construction Math, Introduction to Hand Tools, Introduction to Power Tools, and Introduction to Blueprints, Basic Rigging, Basic Communication Skills, and Basic Employability Skills.

Textbooks

NCCER. Core Curriculum Trainee Guide Pearson. 2015. Edition: 5th. ISBN: 978-0-13-413098-9 (Provided by your course Instructor from classroom set)

Student Learning Outcomes:

- A. Communicate effectively
- B. Integrate technology
- C. Learn effectively
- D. Demonstrate cooperative teamwork skills
- E. Apply safety in the workplace
- F. Think critically and creatively
- G. Demonstrate responsible work ethics

Competencies

00101-09 Basic Safety

- 1. Explain the role that safety plays in the construction crafts.
- 2. Describe the meaning of job site safety.

3. Describe the characteristics of a competent person and a qualified person.
4. Explain the appropriate safety precautions to take around common job site hazards.
5. Demonstrate the use and care of appropriate personal protective equipment (PPE).
6. Properly wear and remove person protective equipment (safety goggles, hard hats, and person fall protection).
7. Follow the safety procedures required for lifting heavy objects.
8. Describe safe behavior on and around ladders and scaffolds.
9. Explain the importance of Hazard Communications (HazCom) and material safety data sheets (MSDS).
10. Describe fire prevention and firefighting techniques.
11. Define safe work procedures to use around electrical hazards.

00102-09 Introduction to Construction Math

12. Add, subtract, multiply, and divide whole numbers, with and without a calculator.
13. Use a standard ruler and metric ruler to measure.
14. Add, subtract, multiply, and divide fractions.
15. Add, subtract, multiply, and divide decimals, with and without a calculator.
16. Convert decimals to percentages and percentages to decimals.
17. Convert fractions to decimals and decimals to fractions.
18. Explain what the metric system is and how it is important in the construction trade.
19. Recognize and use metric units of length, weight, volume, and temperature.
20. Recognize some of the basic shapes used in the construction industry, and apply basic geometry to measure them.

00103-09 Introduction to Hand Tools

21. Recognize and identify some of the basic hand tools used in the construction trade.
22. Use hand tools safely.
23. Describe the basic procedures for taking care of hand tools.

00104-09 Introduction to Power Tools

24. Identify power tools commonly used in the construction trade.
25. Use power tools safely.
26. Explain how to maintain power tools properly.

00105-09 Introduction to Construction Drawings

27. Introduction to blueprints.
28. Recognize and identify basic blueprint terms, components, and symbols.
29. Relate information on blueprints to actual locations on the print.
30. Recognize different classifications of drawings.
31. Interpret and use drawing dimensions,

00106-09 Basic Rigging

32. Identify and describe the use of slings and common rigging hardware.
33. Describe basic inspection techniques and rejection criteria used for slings and hardware.
34. Describe basic hitch configurations and their proper connections.
35. Describe basic load-handling safety practices.
36. Demonstrate proper use of American National Standards Institute (ANSI) hand signals.

00107-09 Basic Communications Skills

37. Demonstrate the ability to interpret information and instructions presented in both written and verbal forms.
38. Demonstrate the ability to communicate effectively in on-the-job situation using written and verbal skills.

00108-09 Basic Employability Skills

39. Explain the construction industry, the role of the companies that make up the industry, and the role of individual professional in the industry.
40. Demonstrate critical-thinking skills and the ability to solve problems using those skills.
41. Demonstrate knowledge of computer systems and explain common uses for computers in the construction industry.
42. Demonstrate effective relationship skills with teammates and supervisors, the ability to work on a team, and appropriate leadership skills. 00109-09 Introduction to Material Handling 43, define a load.
44. Establish a pre-task plan prior to moving a load.
45. Use proper materials-handling techniques.
46. Choose appropriate materials-handling equipment for the task.
47. Recognize hazards and follow safety procedures required for materials handling.

Guidelines for Success

Assessment Plan

Assessment is an integral part of the educational process at Washburn Tech and accurate feedback is an important tool in continuously improving the institution's technical programs. Students can expect to participate in assessment activities prior to entry into programs, within specific courses and following program completion for specific fields of study.

Grading Rationale and Grading Scale

100% - 90% = A

89% - 80% = B

79% - 70% = C

69% - 0% = class must be retaken for credit towards certificate

25% - Attendance, Safety, Quality/Productivity, Team Work, Initiative & Energy, Problem Solving

75% - Daily Quizzes & Assignments, Performance Assessments (Individual Evaluations and Projects),

NCCER Certification Exams, Mid-terms and Final Exams

It is possible to pass this course without gaining the NCCER certification. NCCER requires a pass/fail on all performance profiles and a minimum of 70% to pass exam for certification.

Attendance

Your course instructor recognizes the correlation between attendance and both student retention and achievement. Students must be enrolled before they can attend class. Students are expected to attend all class sessions and activities for which they are registered. Any class session or activity missed, regardless of cause, reduces the opportunity of learning and may adversely affect a student's achievement in the course.

A student who has to be absent because of jury duty or court-mandated appearance needs to contact the instructor in advance of the absence in order that a plan for making up work missed can be made. When observance of religious holidays of students' own faith interferes with attendance in class, class activities, examinations and official ceremonies; and with class work assignments, students are required to notify the instructor or other appropriate personnel within the department in advance of such absences.

Students are held responsible for material covered during their absences, with reasonable time provided to complete make-up assignments. The Instructor will devise a plan for making up work missed. When practical, major class assignments, major examinations and official ceremonies shall be scheduled on other than major religious holidays. Students who believe they have been unreasonably denied educational benefits due to their religious beliefs or practices may seek redress through the student appeal procedures.

Disability

The Americans with Disabilities Act (ADA) Office is responsible for assisting in arranging accommodations and for identifying resources at Washburn Institute of Technology for persons with disabilities. Qualified students with disabilities MUST self-identify by completing an application. In addition students must provide appropriate medical documentation to the ADA coordinator to be eligible for accommodations. New requests for accommodations should be submitted at least two months or more prior to the date the accommodations are needed. However, please contact the ADA office as soon as a need may arise. Depending on the accommodation request, four to eight weeks lead time may be needed for timely and effective provision of accommodations.

The ADA Office coordinates and assists in arranging accommodations it deems appropriate for eligible students on a case-by-case basis. If you are a student with a disability that may substantially limit your ability to participate in any of our classes and you believe that you will need accommodations, it is your responsibility to contact: ADA Coordinator, Phone: 785.670.3365, Email: gloria.christian@washburn.edu.

Washburn University prohibits discrimination on the basis of race, color, religion, age, national origin, ancestry, disability, sex, sexual orientation, gender identity, genetic information, veteran status, or marital or parental status. The following person has been designated to handle inquiries regarding the non-discrimination policies: Dr. Pamela Foster, Equal Opportunity Director/Title IX Coordinator, Washburn University, 1700 SW College Ave, Topeka, Kansas 66621, 785.670.1509, eodirector@washburn.edu