



BDT117 Carpentry I Syllabus

Course Information

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| Credits | 4 |
| Campus | Washburn Institute of Technology |
| Address | 5724 SW Huntoon |
| City/State/Zip | Topeka, Kansas 66604 |
| Office Fax | 785-273-7080 |

Description

The intent of this course is to teach the students the history of the construction trade, building materials, different fasteners and adhesives, hand and power tools and reading plans and elevations. It also describes the apprentice program and career opportunities. The course will follow the NCCER modules for: Orientation to the Trade, Building Materials, Fasteners and Adhesives, Hand and Power Tools, and Reading Plans and Elevations.

Textbooks

NCCER. Carpentry Fundamentals Level 1 Trainee Guide. Prentice Hall. 2006. Edition: 4th. ISBN: 978-0-13-228592.

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

Orientation to the 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 opportunities with the carpentry trade.
- 4. Identify the career and entrepreneurial opportunities within the carpentry trade.
- 5. Identify the responsibilities of a person working in the construction industry.
- 6. State the personal characteristics of a professional.
- 7. Explain the importance of safety in the construction industry.

Building Materials, Fasteners, and Adhesives

8. Identify various types of building materials and their uses.
9. State the uses of various types of hardwoods and softwoods.
10. Identify the different grades and markings of wood building materials.
11. Identify the safety precautions associated with building materials.
12. Describe the proper method of storing and handling of building materials.
13. State the uses of various types of engineered lumber.
14. Calculate the quantities of lumber and wood products using industry standard methods.
15. Describe the fasteners, anchors, and adhesives used in construction work and explain their uses.

Hand and Power Tools

16. Identify the hand tools commonly used by carpenters and describe their uses.
17. Use hand tools in a safe and appropriate manner.
18. State the general rules for operating all power tools, regardless of type.
19. State the general rules for properly maintaining all power tools, regardless of type.
20. Identify the portable power tools commonly used by carpenters and describe their uses.
21. Use portable power tools in a safe and appropriate manner.

Reading Plans and Elevations

22. Describe the types of drawings usually included in a set of plans and list the information found on each types.
23. Identify the different types of lines used on construction drawings.
24. Identify selected architectural symbols commonly used to represent materials on plans.
25. Identify selected electrical, mechanical, and plumbing symbols commonly used on plans.
26. Identify selected abbreviations commonly used on plans.
27. Read and interpret plans, elevations, schedules, sections, and details contained in basic construction drawings.
28. State the purpose of written specifications.
29. Identify and describe the parts of a specification.
30. Demonstrate or describe how to perform a quantity take-off for materials.

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% - 89% = A
88% - 79% = B
78% - 69% = C
68% - 59% = D
58% & Below = F

40% - Participation = Attendance, Tardies, Work Attire, Textbook, Tools, Behavior, Clean-up

30% - Daily Quizzes & Assignments

20% - Performance Assessments (Individual Evaluations)

10% - NCCER Accrediting Exams

Attendance

Classroom attendance is required. Material missed must be made up with instructor.

Disability

The Special Support Services (SSS) 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 register and provide documentation with the office to be eligible for services. New requests for accommodations should be submitted two months or more prior to the date services should begin; however, contact the SSS Office as soon as a need may arise. Depending on the accommodation request, four to eight week lead time may be needed for timely and effective provision of services. SSS coordinates and assist in arranging services it deems appropriate of 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 this class and believe you will need accommodations, it is your responsibility to contact:

Special Support Services Coordinator

Phone: 785-228-6356

E-Mail: ssscoordinator@washburn.edu

