

New Horizons Career and Technical Education Center
Carpentry 1 & 2 Course Syllabus
Mr. Ray Burton
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Office Hours

7:00 a.m. – 7:15 a.m.
10:10 a.m. – 10:40 a.m.
2: 45 p.m. – 3:00 p.m.

Course Description

This is two year program that trains future builders. Students are taught skills needed for employment in today's building trades. Through out the program, students gain skills daily through practical experiences using hand tools and power tools. Students also participate in several building projects. Student may choose to take one of the national certification tests.

Class Textbooks

- Core Curriculum, Third Edition
Published by: Prentice Hall
Copyright: 204
- Contren NCCER
Residential Carpentry I
Publisher, Prentice Hall
Copyright: 2003
- Conten NCCER
Residential Carpentry 2
Publisher: Prentice Hall
Copyright: 2003
- Modern Carpentry
Authors, Wills H Wagner, Howard Bud Smith, Michael B Kopf
Publisher: Goodheart-Willcox Company Inc.
Copyright: 2000

Course Fees

- | | |
|--|-----------|
| • Activity fee includes Skill USA club membership | \$16.00 |
| • 1 st semester pre test NOCTI | \$11.00** |
| • 2 nd semester NOCTI Test (all second year students) | \$18.50** |

**may be taken more than once

Materials

- Safety glasses provided (second pair \$ 4.50)
- Combination lock (\$5.00 ea if not returned)

- Students may bring work clothes
- Accident Insurance (school has no coverage on student)

Evaluation of Student Performance/Grading

| | |
|---|------|
| Employability Skills | 30% |
| Related Institutions (classroom activity) | 35% |
| Shop (hands on competencies) | 35% |
| Total for nine weeks grade | 100% |

Semester Grade:

Second Year Carpentry

First Nine Weeks

Estimating Construction Materials

Topics: Estimating quantity take off's applied basic formulas
the following topics will be covered:

- Foundation
- Footing
- Framing
- Masonry
- Insulation
- Roofing
- Siding

Materials take off cover:

- Dirt
- Concrete
- Paint
- Shingles
- Flooring
- Carpet
- Siding
- Cabinets (Bathrooms and Kitchens)

Second Year Carpentry

Second Nine Weeks

Examining all aspects of Industry

- Planning (Codes, Zoning)
- Finance (Construction Jobs)
(Buying a home)
- Technical and Production Skills
- Labor Issues
- Health Safety and Environment Issues

Second Year Carpentry

Third Nine Weeks

- Working in groups, frame floor system
- Working in groups, frame wall for house
- Working in groups, frame roof for house
- Working in groups, install exterior siding
- Working in groups, install door and windows
- Working in groups, install cornice
- Working in groups, install roof covering

Second Year Carpentry

Fourth Nine Weeks

Personal Objectives

- Construct personal goals and values
- Set short term goals and long term goals
- Complete a job application
- Interview for a job
- Compose a follow-up letter
- Compose a personal resume

Second year, second semester students may be placed participative in O.J.T. training

New Horizons Career and Technical Education Centers

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First Nine Weeks

Orientation to Construction

- Investigate occupational opportunities in the construction field.
- History of construction/carpentry
- Personal characteristics of trade
- School regulations and procedures
- Classroom rules

- Staff

Safety/OSHA

Safety is emphasized in every phase of the carpentry program. To help the students develop a responsible attitude toward safety in the work place

- General Safety (Fire, lifting, etc.)
- School Safety
- Classroom/shop safety/MSDS sheet
- Sexual Harassment in the work place and/or school
- Tool and machine safety
- Construction safety
- OSHA Safety

Measurements

- Students develop skills to measure with accuracy within 1/16"
- Reading a ruler to the following scales: 1/2, 1/4, 1/8, 1/16, of an inch and feet, yards
- 100' feet tape
- Framing square
- Combination Square

Hand tools

- Develop the skills necessary to use hand tools
- Hammer
- Handsaw
- Squares
- Chisels
- Pry Bar
- Cat Paws

Second Nine Weeks

Portable Power Tools

To be able to select the proper tool for the correct job, and use in a safe manner.

- Electrical
- Battery Tools
- Skill Saw
- Drills
- Jig Saw
- Planer
- Sanders

- Router

Fasteners

- Nails, Screws
- Nuts & Bolts
- Special Fasteners

Basic Framing Technology

- Western Framing
- Balloon Framing
- Metal Framing (2nd year)

Building Materials

- Wood
- Sheetrock
- Metals
- Asphalt shingles
- Concrete
- Paints

Third Nine Weeks

Woodworking Machines

Understand the safety operation of woodworking machines.

- Table saw
- Band saw
- Drill press
- Planer
- Jointers
- Sharper

Blueprint Reading

- Scaling
- Foundation Plan
- Floor Plan
- Site Plane
- Roof Plane
- Section
- Detail

Insulation

- Principle of heat transfer
- R- Value
- Moisture barriers
- Dead air space

Roof Framing

- Common Rafter
- Hip Rafters
- Valley Rafters
- Jack Rafters
- Sheathing
- Shingling
- Flashing

Fourth Nine Weeks

Doors and Window

Proper installing of doors or windows

- Interior doors
- Exterior doors
- Garage doors
- Sliding doors
- Windows wood
- Metal
- Vinyl siding

Exterior Wall Finish

Common Siding

- Wood Siding
- Vertical Siding
- Plywood Siding
- Vinyl Siding
- Concrete Siding

Roofing Construction

- Build up Roof
- Asphalt shingle
- Wood Shingle
- Slate Shingle

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