

Cabinetmaking 1

One Semester (85 hours) (½ Credit)

9th – 12th grades

No Prerequisites

Texts: Exploring Woodworking Zimmerman/McWard 1993

This course is designed to introduce students to the basics of woodworking. Students will be shown the various equipment and tools used in woodworking and the importance of proper safety procedures. Students will have a choice of various small projects they can construct.

Course grade is determined by:

Daily work	45%
Project	35%
Tests	10%
Worksheets	5%
Housekeeping	5%

Cabinetmaking 1

- I. Careers
 - A. Discuss careers
 - B. Research chosen careerRead pages: 27 - 29
- II. Design furniture and cabinets
 - A. Discuss fundamentals of good design
 - B. Review elements and principles of designRead pages: 41 - 52
- III. Material planning and estimation
 - A. Research and plan project
 - B. Estimate materials and total cost of project including board feet
 - C. Develop plan of procedure and cutting list for a jobRead pages: 205 - 206
- IV. Machine tool safety
 - A. Review hand tool uses and safety
 - B. Discuss machine tool uses and their safety
 - C. Review and pass safety testsRead review sheets
- V. Reading multi-view drawings and sketches
 - A. Draw orthographic projections of designated objects
 - B. Make sketch of proposed projectRead pages: 185 – 189, 204 - 205

- VI. Safety procedures/rules
- A. Discuss personal safety
 - B. Discuss fire safety
 - C. Discuss electrical safety
 - D. Discuss chemical safety
- VII. Measuring devices and layout
- A. Discuss various measuring devices
 - B. Measure lengths to the nearest 1/16th inch
 - C. Discuss laying out project with minimal waste
 - D. Discuss laying out project with minimal waste.
- Read pages: 228 - 230.
- VIII. Joinery
- A. Discuss and demonstrate butt, dado, rabbet and biscuit joints
- Read pages: 507 – 509, 517 - 523
- IX. Fastening and gluing stock
- A. Fasten stock with glue, screws, and nails
 - B. Demonstrate counterbore, countersink, and plug cutting
 - C. Discuss various clamps and their applications
- Read pages: 533 – 535, 538 - 543
- X. Preparation for finishing
- A. Discuss various types of sandpaper
 - B. Discuss application for wood fillers
 - C. Discuss acceptable surfaces for finishing
- Read pages: 786 – 788, 792 - 793
- XI. Staining
- A. Discuss various types of stains
 - B. Apply a stain
- Read pages: 814 - 816
- XII. Finishing equipment and procedures
- A. Discuss methods of applying finishes
 - B. Discuss various finishes
- Read pages: 808 - 809
- XIII. Drill press/portable drill
- A. Use drill to counterbore, countersink cut plugs.
 - B. Drill pilot holes and drive screws
- XIV. Router
- A. Shape edges with a bit
 - B. Use router to cut a groove, dado and rabbet

XV. Sander

- A. Replace abrasive on a sander
- B. Finish a wood surface with a sander
- C. Set up and use a belt sander
- D. Set up and use a random orbit disc sander
- E. Use a spindle sander

XVI. Table saw

- A. Crosscut using a table saw
- B. Rip using a table saw

XVII. Radial Arm Saw

- A. Crosscut with a radial arm saw
- B. Make multiple cuts of equal length with a radial arm saw

XVIII. Jointer/Planer

- A. Square board edge perpendicular to face
- B. Plane board to specific thickness

XIX. Bandsaw

- A. Make cuts using a miter gage or fence
- B. Make a freehand cut
- C. Cut miters using a miter gage

CLASS RULES

1. Be on time (Inside the classroom Door)
2. Vandalism will not be tolerated
3. Destruction of others property or theft will not be tolerated
4. No headphones in the lab
5. No food or drinks in the drafting room and no food in the shop.
6. When entering the shop come through the middle door.
7. Do not leave the classroom/ shop without permission.

CAREER PAPER

1. Pick a career that you think you would enjoy doing.
2. Explain what the job is and the work you will be doing.
3. Talk about working conditions (outside, dangerous, etc.)
4. What is the salary and any benefits.
5. What is the job outlook? (will there be this job in 10 years?)

Write at least $\frac{3}{4}$ of a page paper in paragraph form answering all of the above statements.