

This course outline has been prepared in conjunction with the State of California Technology Frameworks.

The teacher of this course is directed to refer to the Framework for a more detailed explanation and analysis of the topics contained in this outline.

COURSE TITLE:

Advanced Woodworking

COURSE DESCRIPTION:

This course expands on Introduction to Woodworking. It is for students exploring woodworking as a career. Machine usage and joinery is taught from an industrial view rather than for a hobbyist. Careers, industrial safety and finishing methods are stressed.

COURSE OBJECTIVES:

The student will be taught the skills and competencies of the course outline.

1. The student will have knowledge and perform to industrial safety regulations in the use of woodworking tools, machines and finishing materials.
2. The student will be able to design and complete a three-view drawing and write a bill of materials for a teacher approved project.
3. The student will be able to set-up various woodworking machines to safely perform operations of jointing, boring, sizing and shaping materials.
4. The student will be able to assemble a project using various fasteners, appropriate to the design and function.
5. The student will be able to select and mount various hardware to have properly functioning drawers and doors in a project.
6. The student will be able to prepare the surface and apply a finish to a project appropriate to its design and function.

LENGTH OF COURSE:

One semester

10/25/88

ADVANCED WOODWORKING

I. ORIENTATION

- A. Shop Rules
- B. Grading Policy
- C. Fire and Disaster Procedure
- D. Career Opportunities
- E. Certificate Program

II. SAFETY

- A. General Safety
- B. Material Handling
- C. Industrial Requirements
- D. Toxic and Hazardous Shop Materials

III. DESIGN AND CONSTRUCTION OF FURNITURE

- A. History of Furniture
- B. Standard Heights and Sizes
- C. Function, Durability and Practicality
- D. Types of Doors
- E. Drawer Construction

IV. BLUEPRINT READING AND SHOP DRAWING

- A. Title Block
- B. Scale
- C. Views
- D. Line Weight
- E. Dimensions

V. MATERIAL AND USE

- A. Growth of Lumber
- B. Lumbering and Sawmills
- C. Types of Wood
- D. Defects

VI. MACHINES AND PORTABLE

- A. Safety Operation
- B. Set-up and Operation
- C. Clean-up and Maintenance

VII. WOOD JOINTS

- A. Types
- B. Usage
- C. Construction

VIII. GLUING AND CLAMPING

- A. Types of Glue
- B. Types of Clamps
- C. Fasteners
- D. Sub Assemblies

IX. HARDWARE

- A. Hinges and Pulls
- B. Catches
- C. Drawer Guides

X. FINISHING MATERIALS

- A. Preparing the Surface
- B. Stains
- C. Laquers and Paints
- D. Brush and Spray Equipment
- E. Finish Preservatives
- F. Handling of Toxic Finishing Material

XI. MASS PRODUCTIONS

- A. Interchangeable Parts
- B. Duplicating Patterns

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GRADE LEVEL:

9 - 12

PREREQUISITES:

Satisfactory completion of Introduction to Woodworking.

CREDIT:

5 units/semester of Practical Arts or elective

TEXTBOOKS:

Feirer, John L., Wood Technology And Processes
Bennett and McKnight, 1987

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