

# YOSEMITE REGIONAL OCCUPATIONAL PROGRAM

## CABINET CONSTRUCTION I

CBEDS Code: 5520

<u>JOB TITLES</u>	<u>DOT NO.</u>
Cabinetmaker	660.280.010
Cabinet Assembler	763.684-014
Cabinet Finisher	703.684-014

### **Course description:**

This course is designed to give students job entry level skills for the cabinet making trade. The course is structured in segments designed flexibly enough to serve students with limited background in woodworking, and students with considerable training and experience. The built-in flexibility allows students to advance at their own rate, thus achieving maximum personal development. In addition to general areas such as shop safety, hand tools, power machinery, wood joints, and finishing techniques, the curriculum focuses strongly on personal development, problem solving, design, basic drafting techniques, basic plan reading, and attitudinal skills. Cabinet Construction I prepares students either for entry into the trade upon graduation from high school or for more advanced training in Cabinet Construction II.

*Recommended Prerequisites:* None

DURATION: (360) hours

CREDIT: 5 units

ARTICULATED WITH POSTSECONDARY INSTITUTIONS: N/A

## INSTRUCTIONAL MATERIALS

Basic Text(s):

Modern Cabinetmaking:

By: William D. Umstattd and Charles W. Davis; Goodheart – Wilcox

Supplementary Text(s):

Modern Cabinetmaking Workbook:

By: Umstattd/Davis; Goodheart-Wilcox

**Instructional Content**

Instruction will include:

**Student Outcomes**

At the end of instruction, the student will be able to:

**Hours**

CL=Classroom  
CC=Comm. Class.

		Anchor And CR	CTE	CL	CC
<p><b>1. Review of Hand Tools.</b></p> <ol style="list-style-type: none"> <li>1. Hand tools &amp; hand power tools:               <ol style="list-style-type: none"> <li>a. Tool identification.</li> <li>b. Tool safety.</li> </ol> </li> <li>2. Measurement.</li> <li>3. Basic plan reading.</li> <li>4. Three basic finishes.</li> <li>5. Basic drafting.</li> <li>6. Projects and/or evidence of proficiency:               <ol style="list-style-type: none"> <li>a. Personal drawing &amp; project.</li> <li>b. Evaluation project.</li> </ol> </li> </ol>	<p><b>Goal: The student will understand the names, functions and safe use of the nonpower and power handtools.</b></p> <ol style="list-style-type: none"> <li>A. Properly identify and use hand tools,</li> <li>B. Practice safe and appropriate use of each tool.</li> <li>C. Identify all parts of each hand tool used on the job.</li> <li>D. Demonstrate their knowledge of each skills listed from test, finished drawings and projects.</li> </ol>	<p>4.0 6.0  CR 1,2 and 5</p>	<p>A4.1- A4.7 A7.9</p>	<p>40</p>	
<p><b>2. Review of Power Machinery.</b></p> <ol style="list-style-type: none"> <li>1. Power machinery:               <ol style="list-style-type: none"> <li>a. Identification.</li> <li>b. Safety.</li> </ol> </li> <li>2. Intermediate plan reading.</li> <li>3. Intermediate drafting.</li> <li>4. Projects and/or evidence of proficiency:               <ol style="list-style-type: none"> <li>a. Game board project.</li> <li>b. Picture frame drawing &amp; project.</li> <li>c. Wall shelving project.</li> <li>d. Personal drawing &amp; project.</li> <li>e. Evaluation project.</li> </ol> </li> </ol>	<p><b>Goal: The student will demonstrate knowledge of personal safety and safe work practices</b></p> <ol style="list-style-type: none"> <li>A. Understand functions and safe uses of tools and machines</li> <li>B. Identify tools and machines used by a carpenter</li> <li>C. Demonstrate ability to apply communication skills</li> <li>D. Demonstrate ability to read and interpret prints</li> <li>E. Understand layout processes</li> <li>F. Understand planning processes</li> </ol>	<p>6.0 7.0  CR 1,2 and 5</p>	<p>A1.1- A1.9 A3.0- A3.6 A6.1</p>	<p>80</p>	
<p><b>3. Advanced Power Machinery.</b></p> <ol style="list-style-type: none"> <li>1. Advanced power machinery techniques.</li> <li>2. Basic design techniques.</li> <li>3. Wall cabinet project.</li> <li>4. Personal project.</li> <li>5. Evaluation project.</li> <li>6. Wood joints</li> <li>7. Bread box with tambour door</li> <li>8. Night stand</li> <li>9. Book rack</li> </ol>	<p><b>Goal: The student will understand the planning and layout processes.</b></p> <ol style="list-style-type: none"> <li>A. Interpret prints</li> <li>B. Apply information in basic planning and layout processes.</li> <li>C. Understand they way in which cabinets are constructed.</li> <li>D. Understand the way in which furniture is constructed.</li> <li>E. Understand the finishing processes (spraying, rolling, brushing)</li> </ol>	<p>7.0  CR 1,2 and 5</p>	<p>A1.5- A1.6 A3.0- A3.6 A7.1- A7.9 A6.5 A6.6 A9.1- A9.6</p>	<p>40</p>	
<p><b>4. Cabinet Making.</b></p> <ol style="list-style-type: none"> <li>1. What is cabinet making:               <ol style="list-style-type: none"> <li>a. Jobs available.</li> <li>b. How to become a cabinetmaker.</li> <li>c. To become a cabinetmaker.</li> </ol> </li> </ol>	<p><b>Goal: The student will understand the importance of career planning.</b></p> <ol style="list-style-type: none"> <li>A. Understand career opportunities, training and educational requirements, and how to advance on the career ladder</li> <li>B. Identify career opportunities in carpentry and construction technology</li> <li>C. Identify an occupational interest</li> <li>D. Develop a career plan</li> </ol>	<p>3.0  CR 3, 7 and 12</p>		<p>25</p>	

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5. <b>Cabinet parts &amp; fabrication:</b> 1. Face frame: a. Function. b. Parts. c. Cutting parts. d. Fabrication	<b>Goal: The student will understand the procedures and techniques of constructing face frames.</b> A. Understand layout, milling, and assembly. B. Understand fastening C. Know the tools, machines and materials used in the process. D. Safely and accurately layout and fabricate cabinet face frames, fasten them to casework.	Anchor 5.0 6.0 10.0 CR 1 and 5	CTE A1.0 A4.0-A4.7 A6.1- A6.13 A7.4	CL 25	CC
6. <b>Component parts &amp; fabrication:</b> 1. Sides. 2. Shelves. 3. Partitions. 4. Backs. 5. Toe spaces. 6. Milling of cabinet parts. 7. Cabinet assembly.	<b>Goal: The student will understand the procedures and techniques of constructing cabinet casework.</b> A. Understand layout, milling, and assembly. B. Know the tools, machines and materials used in the process. C. Safely and accurately layout and fabricate cabinet cases.	5.0 6.0 10.0 CR 1 and 5	A1.0 A4.0-A4.7 A7.1-A7.4	60	
7. <b>Fabrication of doors:</b> 1. 3/8" lip. 2. Panel & frame doors. 3. Beveled doors. 4. Fabrication of drawers: a. Parts. b. Milling. c. Guides: Metal; Wood	<b>Goal: The student will understand the procedures and techniques of constructing cabinet doors and drawers.</b> A. Understand layout, milling, and assembly. B. Know the tools, machines, and materials used in the process. C. Safely and accurately fabricate cabinet doors and drawers.	5.0 6.0 10.0 CR 1 and 5	A6.2-A6.4 A7.6 A7.7 A7.9 A7.11 A7.12	40	
8. <b>Finishing cabinets:</b> 1. Sanding a. Staining 2. Finishing: a. Lacquers. b. Stains. c. Oils. c. Pigments.	<b>Goal: The student will understand the finishing processes.</b> A. Understand spraying, rolling, and brushing. B. Safely select and perform finishing processes in an environmentally responsible manner.	5.0 6.0 10.0 1.0 CR 1 and 5	A8.0-A8.4 A9.0-A9.6	25	
9. <b>Hardware:</b> 1. Hinges: a. Types of hinges. b. Installing hinges.	<b>Goal: The student will understand the procedures and techniques of installing hardware on woodcraft products.</b> A. Identify the types of hinges. B. Understand the process of installing hinges. C. Know the tools used in the process.	5.0 6.0 10.0 11.0 CR 1 and 5	A4.2 A4.5 A4.6 A6.1 A6.2 A6.3 A6.4 A7.12	25	