




**Cabinet Making**

Teacher: Roger Bovee


**September 2014**



Content	Skills	Learning Targets	Assessment	Resources & Technology
<p><b>CEQ:</b> How can you build a simple cabinet with no prior knowledge of woodworking?</p> <p><b>UEQ:</b> <i>How do you draw a set of plans for building a piece of furniture?</i></p>  <p><b>A: Drawing types</b></p> <p>A1. Three view A1: Detail drawing A2: Cabinet Oblique A3: Solid model drawing</p>	<p><b>A: Drawing types</b></p> <p>A1: Draw a three view drawing of project. A1: Align views of a drawing in proper locations with each other. A2: Draw details of drawers. A2: Draw a cabinet oblique of project. A3: Draw with computer a solid model of project. A1-A3: Properly constrain all drawings</p>	<p><b>A: Drawing types</b></p> <p>A1-3: I can choose the proper drawing type for my project. A1-3: I can accurately represent all parts of my project in the drawing type of my choice A1-3: I can accurately constrain all parts of my project.</p>	<p><b>A: Drawing types (student chooses one of the following)</b></p> <p>CFA A1: A computer aided or pencil drawn plan of project. CFA A2: A cabinet oblique pencil drawn sketch of project. CFA A3: A project drawing using solid modeling</p> <p><u>Suggested wood projects:</u> wall cabinets, night stands, small gun cabinets</p>	<p><b>A: Drawing types</b></p> <p>Internet and project plan library in shop Oblique drawing paper Graph paper Straight edges and rulers</p>

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<p>UEQ: <i>What are different species of wood?</i> </p> <p><b>B: Wood types</b></p> <p>B1. Deciduous B2. Coniferous B3. Laminate B3. Composites</p> <p>UEQ: <i>How do you estimate the cost of a wood project?</i> </p> <p><b>C: Estimating Material Cost</b></p> <p>C1: Board footage C2: Bill of materials C2: Waste estimating</p>	<p><b>B: Wood types</b></p> <p>B1: Identify hardwoods available in the woodshop B2: Identify the softwood available in the woodshop B3: Identify the veneer laminate and composite materials available in todays woodworking industry.</p> <p><b>C: Estimating Material Cost</b></p> <p>C1: Calculate the board footage C2: Write a bill a materials C2: Calculate the estimated cost of the</p>	<p><b>B: Wood types</b></p> <p>B1-3: I can identify and sort the different wood types into three groups: hardwood, softwood, and laminate/composite</p> <p><b>C: Estimating Material Cost</b></p> <p>C1: I can calculate board footage from a variety of shapes of wood. C2: I can create and complete a bill of materials C3: I can estimate the cost of the project to accurately</p>	<p><b>B: Wood types</b></p> <p>CFA B1-3: 10 point test on various types of wood and laminates.</p> <p><b>C: Estimating Material Cost</b></p> <p>CFA C1: Written bill of materials for a shop project. CFA C2: Estimated cost of the project.</p>	<p><b>B: Wood types</b></p> <p>wood samples from each category</p> <p><b>C: Estimating Material Cost</b></p> <p>C1-2: A bill of materials form</p>

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	project.	include the materials necessary to complete the project.		


**October 2014**

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<p>UEQ: <i>How are hand and power tools used in the woodshop?</i> </p> <p><b>D: Hand and Power tool operation</b></p> <ul style="list-style-type: none"> <li>D1. Measuring tools</li> <li>D1. Sawing tools</li> <li>D1. Cutting tools</li> <li>D1. Drilling tools</li> <li>D1. Sanding tools</li> <li>D1. Fastening tools</li> <li>E1. Table saws</li> <li>E1. Compound mitre saws</li> <li>E1. Wide Belts Sanders</li> <li>E1. Edge Sanders</li> <li>E1. Routers &amp; Shapers</li> </ul>	<p><b>D: Hand and Power tool operation</b></p> <ul style="list-style-type: none"> <li>D1: Identify hand tools and correct application of each tool.</li> <li>D1. Master measuring to the nearest 1/16 of an inch.</li> <li>D1. Identify fasteners and machine tooling</li> <li>E1: Identify power tools and correct application of each tool.</li> </ul>	<p><b>D: Hand and Power tool operation</b></p> <ul style="list-style-type: none"> <li>D1: I can accurately identify and name hand tools from the following categories: measuring tools, sawing tools, cutting tools, drilling tools, sanding tools, and fastening tools.</li> <li>D1: I can use a tape measure to accurately measure various pieces of wood to the nearest 16th of an inch.</li> <li>E1: I can accurately identify and name power tools from</li> </ul>	<p><b>D: Hand and Power tool operation</b></p> <ul style="list-style-type: none"> <li>CSA D1: 10 point hand tool identification test</li> <li>CFA D1. After the instructor demonstrates the tool, a student is asked to re-demo the tool.</li> <li>CFA D1: Students use a tape measure to accurately measure and cut a board during instructor demonstrations.</li> <li>CSA D1: 10 point power tool identification test.</li> </ul>	<p><b>D: Hand and Power tool operation</b></p> <ul style="list-style-type: none"> <li>D1: hand tools from the woodshop</li> <li>D1: tape measures and labeled wood samples</li> <li>E1: access to the woodshop power tools</li> </ul>

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<p>E1. Band saw E1. laser engraving E1. CNC router/lathe</p> <p>UEQ: <i>What safety rules should followed in a woodshop?</i> </p> <p><b>F: Woodshop safety</b></p> <p>F1. Tool operation F2. Eye and ear protection F3. Proper clothing</p> <p>UEQ: <i>How do you fabricate a woodshop project?</i> </p> <p><b>G: Fabrication</b></p> <p>G1. Gluing wood panels G2. Correct wood joints G2. Assembling cases or body of project G3. Door construction</p>	<p><b>F: Woodshop safety</b></p> <p>F1. Recognize potential hazards F2. Demonstrate proper tool set-up F3. Follow all shop safety rules F3. Respect others and property.</p>	<p>the following list: Table saw, miter saw, wide-belt sander, edge sander, routers and shapers, band saws, laser engraving, and CNC router/lathe.</p> <p><b>F: Woodshop safety</b></p> <p>F1-3: I can safely operate all machines and tools in the woodshop. F1-3: I can recognize unsafe machine set-up and operation. F3: I can follow all shop safety rules and respect property.</p>	<p><b>F: Woodshop safety</b></p> <p>CSA F1-F3: Multiple choice safety test. CFA F1-F3: Correct test and discuss answers to the safety quiz. Sign/date CFA F1-F3: Process Rubric assessment</p> <p><b>G: Fabrication</b></p>	<p><b>F: Woodshop safety</b></p> <p>F1: Woodshop safety test handout. F1: SMART Response Clickers F1: Process Rubric</p> <p><b>G: Fabrication</b></p> <p>G. Students work with a partner or a group as they fabricate the project.</p>

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G4. Drawer construction and install.	<p><b>G: Fabrication</b></p> <p>G1. Glue top of project and panels</p> <p>G2. Select the correct assembly process</p> <p>G2. Cut joints to assemble project</p> <p>G3. Calculate the correct door size.</p> <p>G4. Identify the drawer slides and sizes</p> <p>G4. Build a simple drawer.</p>	<p><b>G: Fabrication</b></p> <p>G1: I can prepare wood pieces for proper glue up procedure.</p> <p>G1: I can use clamps to glue up pieces of wood into large panels.</p> <p>G2: I can recognize what joint works best in a certain application and prepare a piece of wood for that joint.</p> <p>G3: Using the above skills and previously learned power tool skills, I can create a door to fit my project properly.</p> <p>G4: I can build a drawer using the construction techniques taught in class.</p>	<p>CFA G1-G4 Bi-weekly working grades are given based on the Progress Rubric.</p> <p>CSA G1-G4: Final grade is based on Product rubric</p> <p>CFA G1-G4: Students build a small trinket box as an evaluative tool for the instructor. This box will give the instructor insight to the students abilities when choosing what final project to build.</p>	<p>G1-4: The Progress Rubric</p> <p>G1-4: The Product Rubric</p>

**November 2014**

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<p>UEO: <i>What type of finishes are applied to furniture?</i></p> <p> <b>H: Finishes</b></p>			<p><b>H: Finishes</b></p>	

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H1. Sanding sealers H2. Varnish or polyurethane H3. Paint finishes H4: Oil finishes	<b>H: Finishes</b>  H1-H4 Apply a finish to the project.	<b>H: Finishes</b>  H1-H4: I can choose the proper finish for my project. H1-H4: I can apply the finish in the proper order and manner.	CSA H1-4: A final grade will be given to the project based on the product rubric.	<b>H: Finishes</b>  H1-4: the Product Rubric