

Furniture Making

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Content	Skills	Learning Targets	Standards	Assessment	Resources & Technology
<p>CEQ: How can you build simple furniture project with basic knowledge of woodworking?</p> <p>UEQ: <i>How do you draw a set of plans for building a piece of furniture?</i> </p> <p>A: Drawing types</p> <p>A1. Three view A1: Detail drawing A2: Nightstand Oblique A3: Solid model drawing</p>	<p>A: Drawing types</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 nightstand oblique of project. A3: Draw with computer a solid model of project. A1-A3: Properly constrain all drawings</p>	<p>A: Drawing types</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>A: Drawing types (student chooses one of the following)</p> <p>CFA A1: A computer aided or pencil drawn plan of project. CFA A2: A Nightstand oblique pencil drawn sketch of project. CFA A3: A project drawing using solid modeling</p>	<p>A: Drawing types</p> <p>Internet and project plan library in shop Oblique drawing paper Graph paper Straight edges and rulers</p>

<p>UEQ: <i>What are different species of wood?</i> </p> <p>B: Wood types</p> <p>B1. Deciduous B2. Coniferous</p>	<p>B: Wood types</p> <p>B1: Identify hardwoods available in the woodshop B2: Identify the softwood available in the woodshop</p>	<p>B: Wood types</p> <p>B1-2: I can identify and sort the different wood types into three groups: hardwood and softwood,</p>		<p>B: Wood types</p> <p>CFA B1-3: 10 point test on various types of woo.</p>	<p>B: Wood types</p> <p>wood samples from each category</p>
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<p>UEQ: <i>How do you estimate the cost of a wood project?</i></p>  <p>C: Estimating Material Cost</p> <p>C1: Board footage C2: Bill of materials C2: Waste estimating</p>	<p>C: Estimating Material Cost</p> <p>C1: Calculate the board footage C2: Write a bill a materials C2: Calculate the estimated cost of the project.</p>	<p>C: Estimating Material Cost</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 include the materials necessary to complete the project.</p>		<p>C: Estimating Material Cost</p> <p>CFA C1: Written bill of materials for a shop project. CFA C2: Estimated cost of the project.</p>	<p>C: Estimating Material Cost</p> <p>C1-2: A bill of materials form</p>
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<p>UEQ: <i>How are hand and power tools used in the woodshop?</i></p>  <p>D: Hand and Power tool operation</p> <ul style="list-style-type: none"> D1. Measuring tools D1. Sawing tools D1. Cutting tools D1. Drilling tools D1. Sanding tools D1. Fastening tools D2. Table saws D2. Compound mitre saws D2. Wide Belts Sanders D2. Edge Sanders D2. Routers & Shapers D2. Band saw 	<p>D: Hand and Power tool operation</p> <p>D1: Identify hand tools and correct application of each tool.</p> <p>D1. Master measuring to the nearest 1/16 of an inch.</p> <p>D1. Identify fasteners and machine tooling</p> <p>D2: Identify power tools and correct application of each tool.</p>	<p>D: Hand and Power tool operation</p> <p>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.</p> <p>D1: I can use a tape measure to accurately measure various pieces of wood to the nearest 16th of an inch.</p> <p>D2: I can accurately identify and name power tools from the following list: Table saw, miter saw, wide-belt sander, edge sander, routers and shapers, and band saws.</p>		<p>D: Hand and Power tool operation</p> <p>CSA D1: 10 point hand tool identification test</p> <p>CFA D1. After the instructor demonstrates the tool, a student is asked to re-demo the tool.</p> <p>CFA D1: Students use a tape measure to accurately measure and cut a board during instructor demonstrations.</p> <p>CSA D2: 10 point power tool identification test.</p>
				<p>D: Hand and Power tool operation</p> <p>D1: hand tools from the woodshop</p> <p>D1: tape measures and labeled wood samples</p> <p>D2: access to the woodshop power tools</p>

<p>UEQ: <i>What safety rules should followed in a woodshop?</i></p>  <p>E: Woodshop safety</p> <p>E1. Tool operation E2. Eye and ear protection E3. Proper clothing</p>	<p>E: Woodshop safety</p> <p>E1. Recognize potential hazards E2. Demonstrate proper tool set-up E3. Follow all shop safety rules E3. Respect others and property.</p>	<p>E: Woodshop safety</p> <p>E1-3: I can safely operate all machines and tools in the woodshop. E1-3: I can recognize unsafe machine set-up and operation. E3: I can follow all shop safety rules and respect property.</p>		<p>E: Woodshop safety</p> <p>E1: Woodshop safety test handout. E1: SMART Response Clickers E1: Process Rubric</p>
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<p>UEQ: <i>How do you fabricate a Nightstand?</i></p>  <p>G: Fabrication of Nightstand</p> <p>G1. Gluing wood panels G2. Pocket screw joints G2. Mortise and Tenon joints G4. Biscuit Joints</p>	<p>G: Fabrication of Nightstand</p> <p>G1. Glue top of project and panels G2. Proper pocket screw creation using the pocket hole machine and the pocket hole jig G3. Create mortises in proper location and tenons on slats for a tight fit. G4. Creating biscuit joint pockets and proper glue up.</p>	<p>G: Fabrication of Nightstand</p> <p>G1: I can prepare wood pieces for proper glue up procedure. G2: I can use the pocket hole jig or machine to create a pocket screw hole. G3: I can create a mortise for the mission slats to beinstalled on the project. G3. I can create a tenon to fit in the mortis G4. I can cut a biscuit slot with the biscuit jointer such that the two pieces will glue up flush.</p>		<p>G: Fabrication of Nightstand</p> <p>CFA G1-G2: Bi-weekly working grades are given based on the Progress Rubric. CSA G1-G2: Final grade is based on Product rubric</p>	<p>G: Fabrication of Nightstand</p> <p>G. Students work with a partner or a group as they fabricate the project. G1-2: The Progress Rubric G1-2: The Product Rubric</p>
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<p>UEO: <i>What type of finishes are applied to furniture?</i></p>  <p>H: Finishes H1. Sanding sealers H2. Varnish</p>	<p>H: Finishes</p> <p>H1-H2 Apply a finish to the project.</p>	<p>H: Finishes</p> <p>H1-H2: I can apply the finish in the proper order and manner.</p>	<p>H: Finishes</p> <p>CSA H1- 3: A final grade will be given to the project based on the product rubric.</p>	<p>H: Finishes</p> <p>H1-3: the product rubric</p>
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