

# VoCATS

## Course Blueprints

### Trade and Industrial Education

#### ***7622 Furniture and Cabinetmaking II***

*Public Schools of North Carolina  
State Board of Education • Department of Public Instruction  
Office of Instructional and Accountability Services  
Division of Instructional Services*

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*Special thanks to the following educators who developed this blueprint.*

Greg Taylor,  
Van Tucker,  
Marcia Steele,  
Steve Ensley,  
Matt Boyle,  
Jim Gillan,  
Sam Weeks,  
Steve Miller

Mt. Airy High School  
J. H. Rose High School  
Currituck County High School  
Clyde A. Erwin High School  
Green Hope High School  
Chapel Hill High School  
REAL, Inc.  
Trade and Industrial Education,  
NC Department of Public Instruction

*This blueprint has been reviewed by business and industry representatives for technical content and appropriateness for the industry. Contact [smiller@dpi.state.nc.us](mailto:smiller@dpi.state.nc.us) for more information.*

## VoCATS Course Blueprint

A course blueprint is a document laying out the framework of the curriculum for a given course.

Shown on the blueprint are the units of instruction, the core competencies in each unit, and the specific objectives for each competency. The blueprint illustrates the recommended sequence of units and competencies and the cognitive and performance weight of the objective within the course.

The blueprint should be used by teachers to plan the course of work for the year, prepare daily lesson plans, and construct instructionally valid interim assessments. Statewide assessments are aligned directly with the course blueprint.

For additional information about this blueprint, contact program area staff. For additional information about VoCATS, contact program area staff or VoCATS, Career-Technical Education, Division of Instructional Services, North Carolina Department of Public Instruction, 6358 Mail Service Center, Raleigh, North Carolina 27699-6358, 919.807.3876, email: [rwelfare@dpi.state.nc.us](mailto:rwelfare@dpi.state.nc.us).

### Interpretation of Columns on VoCATS Course Blueprints

No.	Heading	Column information
1	Comp# Obj.#	Comp=Competency number (three digits). Obj.=Objective number (competency number plus two-digit objective number).
2	Unit Titles Competency and Objective Statements	Statements of unit titles, competencies per unit, and specific objectives per competency. Each competency statement or specific objective begins with an action verb and makes a complete sentence when combined with the stem "The student will be able to. . ." (The stem appears once in Column 2.) Outcome behavior in each competency/objective statement is denoted by the verb plus its object.
3	Time Hrs	Space for teachers to calculate time to be spent on each objective based on their individual school schedule and the students' performance on preassessments.
4	COURSE % Cognitive	A percentage indicates the relative importance or weight of each unit within the total course or program, each competency within the total course or program, or each objective within the total course or program. Information in Column 5 is used to plan the yearly calendar of work and as a Test Blueprint for preassessments and postassessments.
5	COURSE % Perform	A percentage indicates the relative importance or weight of each competency within a specific unit or each objective within a specific unit. Information in Column 4 is used to plan the yearly calendar of work and as a Test Blueprint for interim assessments.
6	Type Behavior	Classification of outcome behavior in competency and objective statements. (C=Cognitive; P=Psychomotor; A=Affective)
7	Integrated Skill Area	Integrate Skills codes: A=Arts; C=Communications; H=Health Safety; M=Math; SC=Science; SS=Social Studies.
8	Core Supp	Designation of the competencies and objectives as Core or Supplemental. Competencies and objectives designated Core must be included in the yearly calendar of work.

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**TRADE AND INDUSTRIAL EDUCATION**  
**COURSE BLUEPRINT for 7622 FURNITURE AND CABINETMAKING II**  
 (Recommended hours of instruction: 270-360)

Comp# Obj.#	Unit Titles   Competency and Objective Statements (The student will be able to:)	Time Hrs.	Cognitive Weight	Performance Weight	Type Behavior	Integrated Skill Area	Core Supp
1	2	3	4	5	6	7	8
	<b>Total Course Weight</b>		<b>100%</b>				
			<b>32%</b>	<b>68%</b>			
<b>A.</b>	<b>LEADERSHIP DEVELOPMENT</b>			<b>2%</b>			
<b>F201.</b>	<b>Demonstrate communication, problem solving, and team building skills.</b>			<b>2%</b>	<b>C3PA</b>	<b>C</b>	<b>Core</b>
<i>F201.01</i>	<i>Demonstrate communication skills.</i>			<i>1%</i>	<i>C3PA</i>	<i>C</i>	<i>Core</i>
<i>F201.02</i>	<i>Demonstrate problem solving and team building skills.</i>			<i>1%</i>	<i>C3PA</i>	<i>C</i>	<i>Core</i>
<b>B.</b>	<b>ORIENTATION</b>		<b>4%</b>				
<b>F202.</b>	<b>Identify terms, skill requirements and employment opportunities.</b>		<b>4%</b>		<b>C3</b>	<b>C M SC SS</b>	<b>Core</b>
<i>F202.01</i>	<i>Describe work performed in the trade, recognizing basic skills and physical requirements.</i>		<i>1%</i>		<i>C1</i>	<i>C SS M</i>	<i>Core</i>
<i>F202.02</i>	<i>Describe materials, processes, and categories of products produced.</i>		<i>1%</i>		<i>C1</i>	<i>C SC SS</i>	<i>Core</i>
<i>F202.03</i>	<i>Identify student requirements for successful participation in the furniture and cabinetmaking program.</i>		<i>1%</i>		<i>C1</i>	<i>C M</i>	<i>Core</i>
<i>F202.04</i>	<i>Discuss the current and historical significance of the furniture and cabinetmaking trade.</i>		<i>1%</i>		<i>C2</i>	<i>C SS</i>	<i>Core</i>
<b>C.</b>	<b>PERSONAL AND JOB SAFETY</b>		<b>10%</b>	<b>4%</b>			
<b>F203.</b>	<b>Define, discuss and interpret basic safety associated in a school shop and workplace after review of the prerequisite safety courses.</b>		<b>10%</b>	<b>4%</b>	<b>C3P</b>	<b>C SC H</b>	<b>Core</b>
<i>F203.01</i>	<i>Explain terms associated with work safety.</i>		<i>2%</i>		<i>C2</i>	<i>C</i>	<i>Core</i>
<i>F203.02</i>	<i>Discuss common hazards in the workplace.</i>		<i>2%</i>		<i>C2</i>	<i>C H</i>	<i>Core</i>
<i>F203.03</i>	<i>Demonstrate use of safety gear, protective garments, and safety equipment.</i>			<i>3%</i>	<i>C3P</i>	<i>C H</i>	<i>Core</i>
<i>F203.04</i>	<i>Discuss personal and general safety rules.</i>		<i>2%</i>		<i>C2</i>	<i>C H</i>	<i>Core</i>
<i>F203.05</i>	<i>Demonstrate how to properly use fire extinguishers.</i>			<i>1%</i>	<i>C3P</i>	<i>C SC H</i>	<i>Core</i>
<i>F203.06</i>	<i>Discuss safety requirements before using hand or power tools.</i>		<i>2%</i>		<i>C2</i>	<i>C</i>	<i>Core</i>
<i>F203.07</i>	<i>Explain a safety checklist.</i>		<i>1%</i>		<i>C2</i>	<i>C</i>	<i>Core</i>
<i>F203.08</i>	<i>Discuss OSHA, MSDS, and right to know regulations.</i>		<i>1%</i>		<i>C2</i>	<i>C</i>	<i>Core</i>

1	2	3	4	5	6	7	8
<b>D.</b>	<b>MEASUREMENT AND LAYOUT TOOLS</b>		<b>1%</b>	<b>6%</b>			
<b>F204.</b>	<b>Demonstrate the various units of measurement and layout tools used in the trade.</b>		<b>1%</b>	<b>6%</b>	<b>C3P</b>	<b>C M</b>	<b>Core</b>
<i>F204.01</i>	<i>Apply basic units of measurement including standard.</i>			1%	C3	C M	Core
<i>F204.02</i>	<i>Perform basic mathematical calculations.</i>			4%	C3P	C M	Core
<i>F204.03</i>	<i>Describe the proper use of measurement and layout tools.</i>		1%		C3	C	Core
<i>F204.04</i>	<i>Use selected measurement and layout tools.</i>			1%	C3P	C M	Core
<b>E.</b>	<b>CABINETMAKING MATERIALS</b>		<b>9%</b>				
<b>F205.</b>	<b>Describe the basic types of materials.</b>		<b>9%</b>		<b>C3</b>	<b>C M SC</b>	<b>Core</b>
<i>F205.01</i>	<i>Discuss characteristics of softwoods and hardwoods.</i>		1%		C2	C M SC	Core
<i>F205.02</i>	<i>Explain the physical characteristics of plywood products.</i>		2%		C2	C M SC	Core
<i>F205.03</i>	<i>Describe characteristics of solid and panel stock.</i>		1%		C1	C M SC	Core
<i>F205.04</i>	<i>Discuss factors that affect the appearance and stability of wood.</i>		1%		C2	C	Core
<i>F205.05</i>	<i>Recognize lumber and plywood grading and marketing terminology.</i>		3%		C1	C M SC	Core
<i>F205.06</i>	<i>Discuss furniture and cabinetmaking materials and laminates.</i>		1%		C2	C SC	Core
<b>F.</b>	<b>POWER TOOLS</b>			<b>20%</b>			
<b>F206.</b>	<b>Demonstrate the safe and proper use of stationary power equipment.</b>			<b>11%</b>	<b>C3PA</b>	<b>C M H SC</b>	<b>Core</b>
<i>F206.01</i>	<i>Operate the following power saws: table saw, radial arm saw, and band saw safely.</i>			4%	C3PA	C M H	Core
<i>F206.02</i>	<i>Operate the following surfacing equipment: planer, jointer and stationary power sander safely.</i>			5%	C3PA	C M H	Core
<i>F206.03</i>	<i>Operate the shaper safely.</i>			1%	C3PA	C M SC	Core
<i>F206.04</i>	<i>Operate the drill press safely..</i>			1%	C3PA	C M H	Core
<b>F207.</b>	<b>Demonstrate the safe and proper use of portable power tools.</b>			<b>9%</b>	<b>C3PA</b>	<b>C H</b>	<b>Core</b>
<i>F207.01</i>	<i>Operate the portable circular saw safely.</i>			2%	C3PA	C H	Core
<i>F207.02</i>	<i>Operate the router safely.</i>			2%	C3PA	C H	Core
<i>F207.03</i>	<i>Operate the saber saw safely.</i>			1%	C3PA	C H	Core
<i>F207.04</i>	<i>Operate the power drill safely.</i>			1%	C3PA	C H	Core
<i>F207.05</i>	<i>Operate the power sander safely.</i>			1%	C3PA	C H	Core
<i>F207.06</i>	<i>Operate the plate/biscuit joiner safely.</i>			1%	C3PA	C H	Core
<i>F207.07</i>	<i>Operate the pneumatic nailer safely.</i>			1%	C3PA	C H	Core
<b>G.</b>	<b>FASTENERS AND HARDWARE</b>		<b>3%</b>				
<b>F208.</b>	<b>Identify basic wood fasteners and hardware.</b>		<b>3%</b>		<b>C1</b>	<b>C</b>	<b>Core</b>
<i>F208.01</i>	<i>Identify nail styles and sizes.</i>		1%		C1	C	Core

1	2	3	4	5	6	7	8
F208.02	Identify basic wood screw styles and sizes.		1%		C1	C	Core
F208.03	Select appropriate decorative and assembly hardware.		1%		C1	C	Core
<b>H.</b>	<b>ADHESIVES AND GLUING</b>			<b>2%</b>			
<b>F209.</b>	<b>Identify basic adhesives, gluing equipment, and clamping fixtures.</b>			<b>2%</b>	<b>C3P</b>	<b>C SC H</b>	<b>Core</b>
F209.01	Demonstrate the properties of basic adhesives used for joining wood.			1%	C3P	C SC H	Core
F209.02	Demonstrate correct use of selected clamping fixtures.			1%	C3P	C	Core
<b>I.</b>	<b>PLANNING AND DESIGN</b>			<b>7%</b>			
<b>F210.</b>	<b>Develop a basic project plan.</b>			<b>7%</b>	<b>C3P</b>	<b>C M</b>	<b>Core</b>
F210.01	Develop and interpret basic plan drawings.			3%	C3P	C M	Core
F210.02	Develop a bill of materials.			1%	C3P	C M	Core
F210.03	Develop a set of specification sheets.			1%	C3P	C M	Core
F210.04	Determine appropriate dimensions, shapes and sizes for project components using trade mathematics.			2%	C3P	C M	Core
<b>J.</b>	<b>PRE-FINISHING</b>		<b>1%</b>	<b>2%</b>			
<b>F211.</b>	<b>Demonstrate the materials and processes required for pre-finishing.</b>		<b>1%</b>	<b>2%</b>	<b>C3P</b>	<b>C SC H</b>	<b>Core</b>
F211.01	Demonstrate basic techniques for preparing surfaces for finishing.			1%	C3P	C H	Core
F211.02	Identify abrasives.		1%		C1	C	Core
F211.03	Demonstrate proper use of abrasives.			1%	C3P	C SC H	Core
<b>K.</b>	<b>PRODUCT CONSTRUCTION AND ASSEMBLY</b>		<b>2%</b>	<b>21%</b>			
<b>F212.</b>	<b>Design and construct a cabinetmaking product.</b>		<b>2%</b>	<b>21%</b>	<b>C3P</b>	<b>C M SC H</b>	<b>Core</b>
F212.01	Design and estimate a project including flow chart procedures.			5%	C3P	C M SC H	Core
F212.02	Identify, select, use appropriate joinery and perform basic assembly techniques.		1%	11%	C3P	C M SC H	Core
F212.03	Construct project components .			3%	C3P	C M SC H	Core
F212.04	Assemble project components.			2%	C3P	C M SC	Core
F212.05	Identify inlay and banding.		1%				
<b>L.</b>	<b>FINISHING</b>		<b>2%</b>	<b>4%</b>			
<b>F213.</b>	<b>Demonstrate the materials and processes required for basic finishing.</b>		<b>2%</b>	<b>4%</b>	<b>C3P</b>	<b>C SC H</b>	<b>Core</b>
F213.01	Discuss different types of stains.		1%		C1	C SC	Core
F213.02	Demonstrate proper staining techniques.			2%	C3P	C SC H	Core
F213.03	Prepare and apply final finish.		1%	2%	C3P	C SC H	Core