



BLUE VALLEY DISTRICT CURRICULUM & INSTRUCTION
Architecture & Engineering
Wood Technologies III



ORGANIZING THEMES INTEGRATED IN PROJECT-BASED LEARNING

FOCUS STANDARDS & SKILLS

<p>THEME: Safety</p> <ul style="list-style-type: none"> • Lab Safety • Tool Recognition and proper use • OSHA safety regulations <p>Time Frame: 1 week and Integrated through all units</p>	<p>Safety and Procedural Skills: KS 460000.2.3 Comply with regulations and applicable codes to establish and manage a legal and safe workplace / jobsite.</p> <ul style="list-style-type: none"> • Apply all shop safety rules and procedures. • Apply OSHA safety regulations.
<p>THEME: Planning and Designing</p> <ul style="list-style-type: none"> • Wood characteristics • Design Process • Plan, design and layout stock <p>Time Frame: 2 weeks</p>	<p>Planning and Designing Skills:</p> <p>KS 38007.5 Develop a plan of procedure for constructing a project.</p> <p>KS 17007.5 Plan, design and layout stock for Wood Technology projects.</p> <p>Career and College Readiness: KS 460000.0.2.7 Read, interpret and use technical drawings, documents and specifications.</p>
<p>THEME: Proper use of Tools in Project construction</p> <ul style="list-style-type: none"> • Use of hand tools • Use of portable power tools • Use of machines <p>Time Frame: 15 weeks</p>	<p>Construction of complex projects</p> <p>KS 38007.1 Properly use, maintain and care for hand tools common to woodworking industry.</p> <p>KS 38007.2 Property set up, maintain and care for machines and power tools as they are used for constructing projects.</p> <p>38007.4 Select quality wood, based upon strength, appearance, durability requirements of the project.</p> <p>KS 17007.5 Perform the steps to interpret, transfer and layout lines &/or markings to be used for constructing a project.</p> <p>KS 17007.7 Review “best-methods” for constructing joints.</p> <p>KS 17007.2 Apply math skills to control distance, spacing and/or angle measurements and placements for constructing a project.</p> <ul style="list-style-type: none"> • linear measurement using appropriate device.

<p>THEME Advanced Project Design and Construction</p> <ul style="list-style-type: none"> • Elements and principles of design • Joining and assembly • Finishing surfaces • Production Process <p>Time Frame: 18 weeks</p>	<p>Construction of advanced projects</p> <p>KS 38007.3 Apply elements and principles of design and knowledge of historical periods to create project plans which fulfill the criteria for the project..</p> <p>KS 38007.5-6 Create a bill of material, a plan of procedure and cost estimates for a project.</p> <p>KS 38007 Utilize the common styles and methods to construct and install cabinet and/or furniture sub-assemblies such as bases, drawers, doors, mouldings, carved appliques, hardware.</p> <p>KS 38007.8 Select and perform “best method” for joint construction and fitting for project.</p> <p>KS 38007.9 Select and perform “best-method” assembly techniques for cabinet or furniture construction.</p> <p>KS 38007.10 Apply a quality finish on a project utilizing appropriate materials and equipment.</p>
<p>THEME/TOPIC: Career and college readiness</p> <ul style="list-style-type: none"> • Career development skills • Teamwork • Personal leadership skills • Academic integration <p>Time Frame: Integrated through all units</p>	<p>KS 460000.0.1.7 Employ valid and reliable research strategies, including ability to interpret information.</p> <p>KS 460000.3.1 Demonstrate time management skills, including prioritizing and ording tasks.</p> <p>KS 460000.0.2.1 Solve problems that involve whole numbers, decimals, and fractions including use of appropriate conversions when necessary.</p> <p>KS 460000.1.2 Apply appropriate academic (math, science, English, social science) and technical skills.</p> <p>KS 460000.3.4 Understand and respond constructively to performance reviews.</p> <p>KS 460000.1.5 Consider the environmental, social, and economic impacts of decisions.</p> <p>KS 460000.1.6 Employ creativity and innovation.</p> <p>KS 460000.18 Utilize critical thinking to make sense of problems and persevere in solving them.</p> <p>KS 460000.1.10 Plan education and career path aligned to personal goals.</p> <p>KS 460000.3.2 Create and utilize employment documents including a resume and portfolio.</p> <p>KS 460000.3.3 Demonstrate interview skills.</p>