BLUE VALLEY DISTRICT CURRICULUM & INSTRUCTION

Architecture & Engineering I Wood Technologies

ORGANIZING THEMES INTEGRATED IN PROJECT-BASED LEARNING	FOCUS STANDARDS & SKILLS
THEME: Safety • Lab Safety • Tool Recognition and proper use • Time Frame: 1 week and Integrated through all units	**Safety and Procedural Skills:** KS 17007.2.3 Comply with regulations and applicable codes to establish and manage a legal and safe workplace / jobsite. • Apply all shop safety rules and procedures. • Recognize and identify basic hand tools and their proper uses in industrial trades. • Recognize and identify basic power tools and their proper uses in the industrial trades.
THEME: INTRODUCTION TO WOODWORKING • Wood characteristics • Design Process • Plan, design and layout stock Time Frame: 2 weeks	**Basic Woodworking Skills:** KS 38007.5 Interpret a plan of procedure for constructing a project. KS 17007.5 Plan, design and layout stock for Wood Technology projects. • Select and use appropriate stock and resources to match project form and function. • Match species of lumber to attributes needed for projects. • Identify uses of panel stock and other engineered wood. • Identify impact of wood movement. • List five attributes of a good design. Career and College Readiness: KS 460000.0.1.10 Identify and explore education and career opportunities aligned to personal goals.

THEME: Proper use of Tools in Project construction • Use of hand tools • Use of portable power tools • Use of machines Time Frame: 15 weeks	**Construction of simple and complex projects demonstrating:** KS 17007.1 Use of hand tools to construct a project Such as: chisels, glue scapers, hammers. KS 17007.3 Use of portable power tools to construct a project Such as: sander, drill. KS 17007.4 Use of machines to construct a project Such as: router, band and scroll saw, drill press, stationary sander, table saw, radial arm saw, jointer and planer, lathe. KS 17007.2 Application of math skills to control distance, spacing and/or angle measurements and placements for constructing a project. • linear measurement using appropriate device.
THEME/TOPIC: Career and college readiness • Career development skills • Teamwork • Personal leadership skills • Academic integration Time Frame: Integrated through all units	KS 460000.0.2.6 Interpret information from manuals, computer printouts, and electronic sources. KS 460000.0..1.8 Utilize problem solving skills. KS 460000.0.2.6 Locate information and select the material needed to accomplish a specific task. KS 460000.0.1.2 Set priorities or the order in which several tasks will be accomplished. KS 460000.0.2.10 Access and use information to develop educational and career options. KS 460000.0.2.1 Solve problems that involve whole numbers, decimals, and fractions including use of appropriate conversions when necessary. KS 17007.2 Calculate and determine accurate measurements with various standard units of measurement. KS 460000.1.12 Work productively in teams while using cultural/global competence.