SOESD Construction Assessment 2011

This assessment contains 80 items, but only 80 are used at one time.

Construction

Number of Correlations	Standard Type	Standard
0	Program	1) Construction
0	Duty	1) Ac MNZ01.01 Use mathematics in the manufacturing process.
0	Standard	1) MNZ01.01.01.01 Add, subtract and divide numbers. Beginning High School
0	Standard	2) MNZ01.01.01.02 Use percentages in order to make adjustments. Advanced High School
0	Standard	3) MNZ01.01.01.03 Make calculations to calibrate equipment. Advanced High School
0	Standard	4) MNZ01.01.01.04 Calculate scrap or waste materials. Advanced High School
0	Standard	5) MNZ01.01.03.01 Identify material cost to produce new part. Advanced High School
0	Standard	6) MNZ01.01.05.01 Understand geometry in order to interpret blueprints. Advanced High School
0	Standard	7) MNZ01.01.06.01 Measure product against specifications for quality assurance. (Tolerances) Beginning High School
0	Standard	5) MNZ01.01.03.01 Identify material cost to produce new part. Advanced High School
0	Standard	6) MNZ01.01.05.01 Understand geometry in order to interpret blueprints. Advanced High School
0	Standard	7) MNZ01.01.06.01 Measure product against specifications for quality assurance. (Tolerances) Beginning High School
0	Duty	2) Bc MNZ01.02 Understand the application of the principles of science used in manufacturing.
0	Standard	1) MNZ01.02.01.03 Describe appropriate disposal of chemicals Beginning High School
0	Standard	2) MNZ01.02.01.04 Identify potential chemical hazards Post-Secondary
0	Standard	3) MNZ01.02.02.05 Recognize how the principles of simple machines are being used in manufacturing equipment. Advanced High School

0	Standard	4) MNZ01.02.02.06 Apply principles of physics to new equipment Post-Secondary
0	Standard	5) MNZ01.02.02.07 Understand the mechanical principles of machinery Advanced High School
0	Duty	3) Cc MNZ05.01 Summarize and explain how manufacturing businesses operate to demonstrate an understanding of key functions within organizations in the industry.
0	Standard	1) MNZ05.01.05.02 Identify the mission, major internal functions and structure of manufacturing businesses. Advanced High School
0	Standard	2) MNZ05.01.05.03 Identify the customers, suppliers, and stakeholders of manufacturing businesses, their roles, and how they relate. Beginning High School
0	Standard	3) MNZ05.01.05.04 Explain the major competitive challenges faced by the manufacturing businesses. Advanced High School
0	Standard	4) MNZ05.01.05.06 Analyze current trends in manufacturing systems. Post-Secondary
0	Standard	5) MNZ05.01.05.07 Describe how manufacturing businesses measure or gauge business performance. Beginning High School
0	Duty	4) Dc MNZ05.02 Analyze and summarize how manufacturing businesses improve performance to demonstrate an understanding of various methods for enhancing production. Technical Content Skill
0	Standard	1) MNZ05.02.05.01 Identify needs and requirements of internal and external customers. Advanced High School
0	Standard	2) MNZ05.02.05.02 Describe customer satisfaction and fulfillment of customer requirements. Advanced High School
0	Standard	3) MNZ05.02.05.06 Explain how plans and budgets are revised to meet goals and objectives. Advanced High School
0	Duty	5) Ec MNZ06.01 Maintain safe and healthful working conditions and environment to ensure employee safety. Basic Career Related Learning Skill
0	Standard	1) MNZ06.01.05.01 Identify the types of risk of injury/illness at work. Beginning High School

0	Standard	2) MNZ06.01.05.02 Identify those who are susceptible to risk of injury/illness at work. Beginning High School
0	Standard	3) MNZ06.01.05.03 Describe ways to positively impact occupational safety and health. Beginning High School
0	Standard	4) MNZ06.02.05.01 Identify key rights of employees related to occupational safety and health. Beginning High School
0	Standard	5) MNZ06.02.05.02 Identify the responsibilities of employers related to occupational safety and health. Advanced High School
0	Standard	6) MNZ06.02.05.03 Explain the role of government agencies in providing a safe workplace. Advanced High School
0	Duty	6) Fc MNZ06.03 Assess types and sources of workplace hazards in order to maintain safe working conditions in a manufacturing business environment.
0	Standard	1) MNZ06.03.05.01 Identify and describe common hazards in the workplace. Beginning High School
0	Standard	2) MNZ06.03.05.03 Identify sources of combustible/flammable materials, fire and emergencies to establish a fire safe environment. Beginning High School
0	Duty	7) Gc MNZ06.04 Control workplace hazards in order to maintain safe working conditions in a manufacturing business environment.
0	Standard	1) MNZ06.04.05.01 Identify procedures necessary for maintaining a safe work area. Beginning High School
0	Standard	2) MNZ06.04.05.02 Identify methods to correct common hazards. Beginning High School
0	Standard	3) MNZ06.04.05.03 Identify methods for disposing of hazardous materials. Beginning High School
0	Standard	4) MNZ06.04.05.04 Demonstrate principals of safe physical movement to avoid slips, trips, and spills. Beginning High School
0	Standard	5) MNZ06.04.05.05 Inspect and use protective equipment (PPE). Beginning High School
0	Duty	8) Hc MNZ08.01 Summarize safety, health, and environmental management systems to

		build an understanding of compliance with governmental policies and procedures for manufacturing businesses.
0	Standard	1) MNZ08.01.05.08 Follow organizational policies and procedures. Advanced High School
0	Standard	2) MNZ08.01.05.09 Educate and orient other workers. Advanced High School
0	Standard	3) MNZ08.01.05.10 Maintain a safe work area. Beginning High School
0	Standard	4) MNZ08.01.05.11 Identify, describe, and report workplace hazards. Beginning High School
0	Duty	9) Ic MNZ10.01 Describe and employ technical skills and knowledge required for careers in manufacturing in order to perform basic workplace activities common to manufacturing. Technical Content Skill
0	Standard	1) MNZ10.01.05.01 Demonstrate the planning and layout processes (e.g., designing, print reading, measuring) used in manufacturing. Beginning High School
0	Standard	2) MNZ10.01.05.02 Read prints and use the information to play, lay out, and produce parts or products. Beginning High School
0	Standard	3) MNZ10.01.05.03 Summarize how materials can be processed using tools and machines. Beginning High School
0	Standard	4) MNZ10.01.05.04 Use tools and the processes of cutting, shaping, combining, forming, etc., of materials to manufacture a part or product. Beginning High School
0	Standard	5) MNZ10.01.05.05 Describe various types of assembling processes (e.g., mechanical fastening, mechanical force, joining, fusion bonding, adhesive bonding) used in manufacturing. Beginning High School
0	Standard	6) MNZ10.01.05.06 Apply appropriate fastening or joining procedure to the design and production of a manufactured part or product. Beginning High School
0	Standard	7) MNZ10.01.05.07 Explain finishing processes (e.g., types of finishing materials, surface preparation, methods of application) used in manufacturing. Advanced High School

0	Standard	8) MNZ10.01.05.08 Select a finishing process for a product appropriate to the job it must perform environment in which it functions, and its aesthetic appeal. Advanced High School
0	Standard	9) MNZ10.01.05.09 Explain the processes of inspection and quality control used in manufacturing. Beginning High School
0	Standard	10) MNZ10.01.05.10 Perform continuous on line inspections to ensure that parts or products meet design specifications. Beginning High School
0	Duty	10) STANDARD 1.0 -- DEMONSTRATE BUSINESS PRACTICES FOR A WOODWORKING BUSINESS
0	Standard	1) 1.1 Estimate supplies, materials and labor costs
2	Standard	2) 1.2 Develop a materials order from a cut list and plan
1	Standard	3) 1.3 Explain product quality standards
0	Standard	4) 1.4 Manage customer relations
0	Duty	11) STANDARD 2.0 -- SAFE WOOD PRODUCTS MANUFACTURING
0	Standard	1) 2.1 Work safely in a woodworking shop
1	Standard	2) 2.2 Maintain safe work attire and appearance
1	Standard	3) 2.3 Wear appropriate personal protective equipment (e.g., eye protection, ear protection, impact hat, etc.)
1	Standard	4) 2.4 Use equipment safety features correctly
1	Standard	5) 2.5 Use proper lifting techniques
0	Standard	6) 2.6 Examine health-related problems that may result from exposure to hazardous materials in the woodworking shop
0	Standard	7) 2.7 Examine principles and methods of dust collection
1	Standard	8) 2.8 Adhere to government regulations (e.g., OSHA, EPA, DNR) in the woodworking shop
1	Standard	9) 2.9 Adhere to lockout / tagout rules and procedures
0	Standard	10) 2.10 Handle, use and store materials according to MSDS sheets
0	Standard	11) 2.11 Apply fire safety rules and procedures

0	Duty	12) STANDARD 3.0 -- PERFORMING BASIC CABINETMAKING SKILLS
2	Standard	1) 3.1 Solve woodworking problems using basic math
0	Standard	2) 3.2 Solve manufacturing and construction word problems
2	Standard	3) 3.3 Calculate linear feet, square feet, and board feet
1	Standard	4) 3.4 Tally accurately
1	Standard	5) 3.5 Measure accurately
1	Standard	6) 3.6 Lay out straight and angled cuts accurately
0	Standard	7) 3.7 Convert standard and metric measurements
1	Standard	8) 3.8 Check stock and/or assemblies for squareness.
2	Standard	9) 3.9 Determine levelness and plumbness of surfaces, using a level.
1	Standard	10) 3.10 Handle/store materials.
2	Standard	11) 3.11 Recognize materials.
1	Standard	12) 3.12 Maintain/make minor adjustments to hand tools.
0	Duty	13) STANDARD 4.0 -- PRACTICE SAFE AND EFFECTIVE USE OF HAND AND PORTABLE POWER TOOLS
0	Standard	1) 4.1 Use steel rules/tapes, marking gauges and T-bevels correctly
1	Standard	2) 4.2 Utilize planes and cabinet scrapers to smooth surfaces
1	Standard	3) 4.3 Utilize wood chisels to notch or mortise stock
1	Standard	4) 4.4 Drive and set nails and screws
1	Standard	5) 4.5 Fasten materials using a pneumatic stapler or nailer
0	Standard	6) 4.6 Utilize a circular saw to make straight, beveled and compound angle cuts
1	Standard	7) 4.7 Utilize a saber/jig saw to plunge/cut curves
2	Standard	8) 4.8 Drill holes with a portable power drill
1	Standard	9) 4.9 Utilize a power drill to bore holes to a specified depth
0	Standard	10) 4.10 Create pocket screwed joints using a drill with jig

1	Standard	11) 4.11 Utilize a router to shape edges and cut a groove, dado and rabbet
1	Standard	12) 4.12 Utilize a router with a dovetail jig
0	Standard	13) 4.13 Utilize plate and biscuit joiners for square and angled joints
0	Standard	14) 4.14 Utilize a sander for roughing and finishing
0	Standard	15) 4.15 Clean and maintain hand and portable power tools
0	Standard	16) 4.16 Utilize a belt sander and grinder to scribe cut a product
0	Duty	14) STANDARD 5.0 -- PRACTICE SAFE AND EFFECTIVE USE OF STATIONARY WOODWORKING MACHINES
2	Standard	1) 5.1 Utilize a table saw to make rip, cross, miter, bevel and groove cuts
2	Standard	2) 5.2 Change and set up blades on a table saw
0	Standard	3) 5.3 Utilize a radial saw to make cross, miter and compound angle cuts
0	Standard	4) 5.4 Change blade and adjust squareness of a radial saw
1	Standard	5) 5.5 Cut vertical with a panel saw
1	Standard	6) 5.6 Change blade on a panel saw
2	Standard	7) 5.7 Cut arcs and circles with a band saw
2	Standard	8) 5.8 Set up, adjust and bore using a drill press
2	Standard	9) 5.9 Utilize a jointer to square, bevel, chamfer, or flatten stock
1	Standard	10) 5.10 Utilize a router in a router table
1	Standard	11) 5.11 Utilize a surfacer to plane and smooth surfaces
0	Standard	12) 5.12 Create edges and curves utilizing a shaper with a fence, collar or dead stop
0	Standard	13) 5.13 Utilize a power feed unit with a table saw, shaper or jointer
1	Standard	14) 5.14 Utilize a bench morticer
1	Standard	15) 5.15 Finish edges using an edge bander
0	Standard	16) 5.16 Set up and utilize a lathe for woodturning
0	Duty	15) STANDARD 6.0 -- EXAMINE COMPUTERS AND COMPUTER-CONTROLED EQUIPMENT IN WOODWORKING

0	Standard	1) 6.1 Find information on (Computer Aided Drafting and Design) CADD drawings
0	Standard	2) 6.2 Investigate (Computer Aided Manufacturing) CAM software for programming Computer Numerical Control (CNC) manufacturing equipment
0	Standard	3) 6.3 Explore CNC equipment and equipment operations
0	Standard	4) 6.4 Demonstrate CNC equipment operation (actual or simulated)
0	Standard	5) 6.5 Enter CNC programs and run a machine to produce a part
0	Standard	6) 6.6 Explore the application of 3-dimensional technology in woodworking
0	Duty	16) STANDARD 7.0 -- INTERPRET PLANS AND PRINTS
1	Standard	1) 7.1 Extract information from plans and specifications
0	Standard	2) 7.2 Read and interpret a floorplan
0	Standard	3) 7.3 Verify design plans with field measurements
2	Standard	4) 7.4 Interpret a cut sheet
1	Standard	5) 7.5 Create a material list
0	Standard	6) 7.6 Specify wood stock for compatibility of grain and color
0	Standard	7) 7.7 Construct and install wood products from plans
0	Duty	17) STANDARD 8.0 -- CUT AND SHAPE STOCK
1	Standard	1) 8.1 Mill rough lumber to create S4S stock
2	Standard	2) 8.2 Cut panelized materials to size and shape
1	Standard	3) 8.3 Manufacture woodturnings
1	Standard	4) 8.4 Manufacture wood moldings
1	Standard	5) 8.5 Re-saw wood parts when required
0	Duty	18) STANDARD 9.0- USE WOOD VENEERS
0	Standard	1) 9.1 Cut and edge veneer for joining
0	Standard	2) 9.2 Join veneer sheets with glue and tape
1	Standard	3) 9.3 Use and machine wood panel products (i.e., particle board, MDF)
0	Standard	4) 9.4 Apply veneer with appropriate adhesive using a platen or vacuum press
0	Standard	5) 9.5 Trim excess veneer

1	Standard	6) 9.6 Prepare veneer surface for finishing
0	Duty	19) STANDARD 10.0 -- DEMONSTRATE PRINCIPLES OF JOINERY
0	Standard	1) 10.1 Explain the purpose and appropriate applications of common joints
0	Standard	2) 10.2 Layout and make butt joints using dowels, screws, biscuits, and/or pocket screws
1	Standard	3) 10.3 Layout and make a dado joint
1	Standard	4) 10.4 Layout and make a rabbet joint
1	Standard	5) 10.5 Layout and make a half-lap joint
2	Standard	6) 10.6 Layout and make a miter joint
0	Standard	7) 10.7 Layout and make a tongue and groove joint
0	Standard	8) 10.8 Layout and make a mortise and tenon joint
1	Standard	9) 10.9 Layout and make a dovetail joint
0	Standard	10) 10.10 Layout and make a finger joint
0	Duty	20) STANDARD 11.0 -- ASSEMBLE WOOD PRODUCTS USING FASTENERS, ADHESIVES AND HARDWARE
1	Standard	1) 11.1 Explain the purpose and appropriate applications of common fasteners
0	Standard	2) 11.2 Use various fasteners and Ready To Assemble (RTA) connectors in manufacturing a wood product
1	Standard	3) 11.3 Explain the purpose and appropriate applications of common woodworking adhesives
0	Standard	4) 11.4 Use adhesives appropriate to the application
1	Standard	5) 11.5 Apply clamping devices.
0	Standard	6) 11.6 Assemble drawer components.
1	Standard	7) 11.7 Use fasteners and levelers to install products
1	Standard	8) 11.8 Fasten stock with metal fasteners (for example, nails, screws, staples, and other mechanical fastners).
1	Standard	9) 11.9 Glue boards edge to edge.
1	Standard	10) 11.10 Construct case/box.
0	Standard	11) 11.11 Assemble panel doors.
0	Standard	12) 11.12 Attach molding/trim.
0	Standard	13) 11.13 Fasten top to casework.

0	Standard	14) 11.14 Intall cabinet hardware.
1	Standard	15) 11.15 Reinforce joints with block.
0	Duty	21) STANDARD 12.0 -- APPLY WOOD VENEERS AND PLASTIC LAMINATES
1	Standard	1) 12.1 Cut laminates with appropriate saw blades and router bits
0	Standard	2) 12.2 Seam two pieces of laminate
0	Standard	3) 12.3 Apply adhesive.
0	Standard	4) 12.4 Apply edge banding.
0	Standard	5) 12.5 Apply laminate to core.
0	Standard	6) 12.6 Apply wood edges.
0	Standard	7) 12.7 Cut plastic to size.
0	Standard	8) 12.8 Fit plastic laminate joints.
0	Standard	9) 12.9 Trim edges.
0	Standard	10) 12.1 Machine/fabricate solid surface materials.
0	Duty	22) STANDARD 13.0 -- DEMONSTRATE FINISHING MATERIALS AND PROCESSES
0	Standard	1) 13.1 Explain the purpose and appropriate applications of various types of finishes and finishing processes
0	Standard	2) 13.2 Follow a finish schedule
0	Standard	3) 13.3 Apply filler to a wood surface
0	Standard	4) 13.4 Apply a wash coat to a wood surface
1	Standard	5) 13.5 Apply a seal coat to a wood surface
1	Standard	6) 13.6 Select and use appropriate abrasive types and grit sizes
0	Standard	7) 13.7 Stain a wood surface
0	Standard	8) 13.8 Apply clear coating finishes to wood surfaces
0	Standard	9) 13.9 Apply pigmented finishes to wood surfaces
0	Standard	10) 13.10 Apply safe and approved (OSHA, EPA, DNR) methods for cleaning finishing tools
1	Standard	11) 13.11 Remove excess glue.
0	Standard	12) 13.12 Swell dents.
1	Standard	13) 13.13 Repair blemishes/touch up finishes.
0	Standard	14) 13.14 Select finishing materials for compatibility.
80	**Correlations**	
80	**Total Correlations**	