MODULE CON2140: FURNITURE MAKING 2 (FRAME & PANEL)

Level: Intermediate

Theme: Manufacturing Systems (Processes and Applications)

Prerequisite: CON1120 Project Management

Module Description: Students use solid and/or composite materials to build a frame and panel product or component.

Module Parameters: Access to a woodworking or materials facility and to instruction from an individual with formal specialized training in cabinetry/carpentry.

Curriculum and Assessment Standards

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
The student will:	*Assessment of student achievement should be based on:*	
• identify and describe the design features and processes used to construct a frame and panel product	• analysis of an existing piece of furniture or drawing to correctly determining the: – materials used in surface and structural components – joints and fasteners – potential weakness and points of wear	10
• apply basic furniture-making skills to plan and construct a component or piece of furniture based on frame and panel construction techniques	• appropriate design selection, modification or creation of a frame and panel product or component that includes a set of drawings, parts list, cost estimate, sequence of operations and work schedule	20
	• construction of a frame and panel product or component. *Assessment Tool* *Project Assessment: Frame and Panel Construction, CON2140–1* *Standard* *The project will be built using the appropriate materials, joinery and finishing techniques; all joints are to be tight fitting and square; finishes are to be smooth and free from production defects. Overall dimensions should be within ± 2 mm* *Performance rating of 2 for each applicable task*	70

MODULE CON2140: FURNITURE MAKING 2 (FRAME & PANEL) (continued)

Module Learner Expectations	Assessment Criteria and Conditions	Suggested Emphasis
The student will: • demonstrate basic competencies.	*Assessment of student achievement should be based on:* • observations of individual effort and interpersonal interaction during the learning process. *Assessment Tool* *Basic Competencies Reference Guide and any assessment tools noted above*	Integrated throughout

Concept	Specific Learner Expectations	Notes
Orientation	*The student should:*	
• Frame and Panel Construction	• identify the construction details of a typical frame and panel component • identify the typical wood joints that are used in frame and panel construction	Point out the need to accommodate the movement of the panel within the frame.
• Fastening Systems	• identify and describe the types of fastening systems that are used in flat frame construction; e.g.: – reinforcing plates – dowelling – biscuits – splines	
• Tool Safety	• describe the safe set-up and operation of hand and/or power tools used to make a series of joints; e.g.: – mortise and tenon – dowel – biscuit – lap – miter – loose tenon.	

MODULE CON2140: FURNITURE MAKING 2 (FRAME & PANEL) (continued)

Concept	Specific Learner Expectations	Notes
Planning and Management	*The student should:*	
• Product Design	• select a frame and panel product or component that requires: – interpretation and development of simple working drawings – use of solid woods and/or composites – use of a variety of wood joints, fasteners and other hardware components – typical lay-up and clamping procedures	
• Work Scheduling	• show a detailed material list, cost estimate and work schedule.	
Implementation		
• Material Processing	• use the appropriate tools, machines and processes to: – measure and lay out stock – cut stock to size – machine and fit joints – lay-up, glue, fasten and/or clamp – fill or plug exposed fasteners (where applicable) – finish the project.	This project can be finished in conjunction with CON2150: Finishing & Refinishing.
Assessment		
• Career Preparation	• maintain a record of completed activities within a portfolio.	