

WOODWORK CONTENT AREAS

CONTENT (AREAS)	COMPETENCIES (GENERAL OBJECTIVES)	DESCRIPTION (SPECIFIC OBJECTIVES)	WEIGHT
<p>General Workshop</p> <p>Safety and Basic First Aid</p>	<ul style="list-style-type: none"> ❖ Observe general safety precautions in the workshop. ❖ Develop safe working attitudes. ❖ Acquire basic skills in administering first aid. 	<ul style="list-style-type: none"> ➤ State reasons for observing safety measures in a workshop. ➤ Apply the appropriate safety measures in the workshop. ➤ Demonstrate precautions to be observed in a workshop. ➤ Identify and use basic first aid items. ➤ Administer basic first aid in case of emergency. 	9
<p>Hand Tools and Special Purpose Tools</p>	<ul style="list-style-type: none"> ❖ Acquire skills in safe handling and use of tools. ❖ Develop skills in effective way of caring and maintaining tools. 	<ul style="list-style-type: none"> ➤ Identify and classify hand tools. ➤ Explain how to care for and maintain hand tools. ➤ Demonstrate the right techniques for using hand tools. ➤ Sketch hand tools. ➤ Select tools for specific jobs ➤ Explain the functions of the parts of tools. 	11

		<ul style="list-style-type: none"> ➤ Describe how to care and maintain the tools. ➤ Classify and state the uses of special purpose tools. ➤ Sketch special purpose tools 	
<p>Timber and Non - Timber Wood Products</p>	<ul style="list-style-type: none"> ❖ Be aware of the characteristics and uses of timber. ❖ Recognize defects in timber. 	<ul style="list-style-type: none"> ➤ Identify the cross-sectional parts of a tree and describe their characteristics and functions. ➤ Explain how the characteristics of the cross-sectional parts of a tree affect its timber and woodwork. ➤ Describe the functions of the parts of a tree in its growth and development. ➤ Differentiate between hardwood and softwood trees by seed, leaves, and structure. ➤ Identify and sketch the methods of conversion ➤ Identify and sketch various marketable sizes of timber. ➤ Assess the methods of seasoning timber. ➤ Demonstrate oven and moisture meter methods of determining the moisture content of timber. ➤ Describe wood preservatives. 	14

	<ul style="list-style-type: none"> ❖ Be aware of the methods of preserving timber. ❖ Appreciate surface quality of timber. ❖ Understand the terms relating to mechanical properties. 	<ul style="list-style-type: none"> ➤ Demonstrate method of applying wood preservatives. ➤ Detect defects in wood. ➤ identify and sketch types of defects. ➤ Differentiate between various types of timber and state their uses. ➤ Analyse the effects of depletion of timber species in the wood industry. ➤ Identify and sketch the features on the surface of a lumber. ➤ Explain the mechanical properties. ➤ Select appropriate materials for a job based on the properties. 	
Woodwork Joints	<ul style="list-style-type: none"> ❖ Be aware of different types of joints used in woodwork. 	<ul style="list-style-type: none"> ➤ Construct items involving angle joints. ➤ Make items involving widening joints. ➤ Construct items involving framing joints. ➤ Sketch types of framing joints. 	8

	❖ Be able to construct different types of joints.		
Design, Making (Realisation) and Marketing	❖ Acquire the skills of solving problems using the design process.	<ul style="list-style-type: none"> ➤ Identify the need in a given situation and write a brief. ➤ State the conditions and constraints related to solving the problem. ➤ Write specifications for possible solutions. ➤ Articulate series of ideas using sketches. ➤ Select the most appropriate solution for the problem. ➤ Draw the final solution in pictorial view. ➤ Prepare working drawings of the final solution in either first or third angle orthographic projection. ➤ Prepare a cutting list. ➤ Prepare materials using the cutting list. ➤ Construct the artifact based on the final solution. ➤ Test and evaluate the artifact. ➤ Write an appraisal report on the artifact. ➤ Explain the term marketing strategies 	12

	❖ Acquire marketing strategies of wooden products.	➤ List advantages and disadvantages of marketing strategies.	
Surface Decoration (Methods) and Finishes	❖ Appreciate types of surface decoration.	<ul style="list-style-type: none"> ➤ Identify and sketch tools for inlaying. ➤ Demonstrate method of inlaying. ➤ Explain methods of veneering. ➤ Identify and sketch veneering tools. ➤ State the uses of veneering tools. ➤ Identify the tools used in laying. ➤ Describe the procedure for laying the decorative veneers. ➤ Identify the tools to be used in laying the laminated plastics. ➤ Demonstrate the processes of laying laminated plastics onto a surface. ➤ State types of edging. ➤ Sketch types of edging 	11

	<ul style="list-style-type: none"> ❖ Provide a smooth finish to a surface. ❖ Apply the right type of finishing. 	<ul style="list-style-type: none"> ➤ Identify the different types of mouldings. ➤ Distinguish between incised and relief carving. ➤ Sketch carving tools ➤ Select appropriate tools for a specific type of carving. ➤ Demonstrate how to care and maintain for carving tools. ➤ Prepare smooth surfaces using the right process. ➤ Identify different types of finishes. ➤ State general characteristics of different types of finishes. ➤ Explain the uses of different types of finishes. ➤ Apply the right type of finishes to items. ➤ Apply safety precautions when finishing. 	
Basic Upholstery Tools and Materials	<ul style="list-style-type: none"> ❖ Acquire skills in basic upholstery. 	<ul style="list-style-type: none"> ➤ Identify tools for upholstery work. ➤ Describe upholstery tools. ➤ Identify materials for upholstery work. ➤ Select a material for specific upholstery work. 	9

		<ul style="list-style-type: none"> ➤ Identify types of platforms. ➤ State the functions of the platform in upholstery work. ➤ Differentiate between fixed and loose platforms. ➤ Select the appropriate platform for a specific job. 	
Portable Power Hand Tools and Woodwork Machines	<ul style="list-style-type: none"> ❖ Acquire skills in the use of power tools ❖ Acquire skills in the operation of woodworking machines. 	<ul style="list-style-type: none"> ➤ Identify parts of planes. ➤ Describe the functions of planes. ➤ Differentiate between portable plane and portable router plane. ➤ Uses the portable power planes ➤ Identify parts of the hand drill. ➤ Explain the functions of the parts of hand drill. ➤ Demonstrate the safe use of the hand drill. ➤ Identify different types of sanders. ➤ Describe the functions of the parts. ➤ Demonstrate correct use of sanders. ➤ Identify parts of saws. ➤ Differentiate between portable circular saw and jig saw. 	10

	<p>❖ Appreciate the need for safety in the workshop.</p>	<ul style="list-style-type: none">➤ State the functions of the parts.➤ Select the appropriate saw for a specific job.➤ Identify parts of the spray gun.➤ Explain the functions of the parts.➤ Demonstrate the safe use of the spray gun.➤ Explain the habit of working safely in the workshop with the woodworking machines.➤ Apply safety precautions in the use of woodworking machines.➤ Identify different types of sawing machines.➤ Describe the functions/uses of each machine.➤ Select the appropriate machine for a specific sawing operation.➤ Differentiate between a surfacer/jointer and a thicknesser.➤ Describe the functions/uses of the machines in the woodwork shop.	
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	<ul style="list-style-type: none"> ❖ Acquire skills in wood turning 	<ul style="list-style-type: none"> ➤ Identify turning tools. ➤ Explain uses of the tools. ➤ Use turning tools. ➤ Demonstrate various types of turning operations. 	
Manufactured Boards	<ul style="list-style-type: none"> ❖ Be aware of type of manufactured boards. ❖ Be aware of chemicals used in producing manufactured boards. ❖ procedures in producing artificial boards. 	<ul style="list-style-type: none"> ➤ Explain types of manufactured boards. ➤ State advantages of manufactured boards over solid wood. ➤ Sketch types of manufactured boards. ➤ List chemicals used as binders when producing particleboards. ➤ Describe procedures used in producing artificial boards. 	10
Shaping and Wood Bending	<ul style="list-style-type: none"> ❖ acquire the skills for bending and shaping wood 	<ul style="list-style-type: none"> ➤ identify different methods of shaping and bending wood. ➤ describe the different methods of shaping and bending wood. 	6

		➤ select and demonstrate the appropriate method for a job in hand.	
			100

TABLE OF SPECIFICATION FOR WOODWORK

	Content Areas	Course Objectives/ Outcomes (Depth Of Knowledge)				TOTAL
		Level 1 Recall	Level 2 Skills and Concept	Level 3 Strategic Thinking	Level 4 Extended Thinking	
1.	General Workshop Safety and Basic First Aid	1	1	4	3	9
2.	Hand and Special-Purpose Tools	2	2	3	4	11
3.	Timber and Non-timber Wood Products	3	4	3	4	14
4.	Woodwork Joints	1	2	3	2	8
5.	Design, Making (Realisation) and Marketing	2	4	3	3	12
6.	Surface Decoration (Methods) and Finishes	2	3	4	2	11
7.	Basic Upholstery Tools and Materials	1	2	3	3	9
8.	Portable Power Hand Tools /Woodwork Machines	1	2	3	4	10

9.	Manufactured Boards	1	3	3	3	10
10.	Shaping and Wood Bending	1	2	1	2	6
	Total	15	25	30	30	100