Yr 10 Industrial Technology – Wood
Lesson Plan

Topic/Main Concept/Theme: Cabinet Work – Side Panel Assembly

SYLLABUS CONTENT to be covered (Objectives)

1 knowledge of and competence in applying Occupational Health & Safety (OHS) risk management procedures and practices
2 knowledge, skills and an appreciation of quality in the design and production of practical projects
3 knowledge and understanding of the relationship between the properties of materials and their applications
4 skills in communicating ideas, processes and technical information with a range of audiences
5 an appreciation of the relationship between technology, leisure and lifestyle activities and further learning
6 the ability to critically evaluate manufactured products in order to become a discriminating consumer
7 knowledge and understanding of the role of traditional, current, new and emerging technologies in industry and their impact on society and the environment

SYLLABUS OUTCOMES to be covered

5.1.1 identifies, assesses and manages the risks and OHS issues associated with the use of a range of materials, hand tools, machine tools and processes
5.1.2 applies OHS practices to hand tools, machine tools, equipment and processes
5.2.1 applies design principles in the modification, development and production of projects
5.2.2 identifies, selects and competently uses a range of hand and machine tools, equipment and processes to produce quality practical projects
5.3.1 justifies the use of a range of relevant and associated materials
5.3.2 selects and uses appropriate materials for specific applications
5.4.1 selects, applies and interprets a range of suitable communication techniques in the development, planning, production and presentation of ideas and projects
5.4.2 works cooperatively with others in the achievement of common goals
5.5.1 applies and transfers acquired knowledge and skills to subsequent learning experiences in a variety of contexts and projects
5.6.1 evaluates products in terms of functional, economic, aesthetic and environmental qualities and quality of construction
5.7.1 describes, analyses and uses a range of current, new and emerging technologies and their various applications
5.7.2 describes, analyses and evaluates the impact of technology on society, the environment and cultural issues locally and globally

Students will learn about:	**Students will learn to:**
• the safe use and handling of hand, power and machine tools • the use of personal protective equipment in the workshop • the properties and working characteristics of solid timber including:	• safely use tools, materials and equipment • use personal protective equipment when working with materials, tools and machines • consider basic timber working characteristics and use solid timbers in the production of

- strength - grain direction - colour - defects • portable power tools and machines used for: - drilling - sanding - cutting	practical projects • use machines and portable power tools in the production of practical projects

Cross Curriculum Content	**ICT**	**Aboriginal and Indigenous**	**Work, Employment and Enterprise**	**Civics and Citizenship**
	Difference and Diversity	**Environment**	**Gender**	
Key Competencies	**Collecting Analysing and organising information**	**Communicating ideas and Information**	**Planning and organising activities**	**Working with others in teams**
	Using mathematical ideas and techniques	**Solving problems**	**Using Technology**	

Literacy	**Numeracy**
• Reading working drawings and cutting lists	• Angles • Measurements

Considerations/Preparation		
Prior Knowledge/Experience • In the workshop • Routing	**Resources/Materials/Technology** • PPE • Glue • Sash Cramps • Biscuits • Plunge Router • Jig	**Key Vocab** • Sash Cramps • Router • Jig
Safety Risk Correct PPE Safety test done on power tools		**Key Questions** • What depth do we set out router to?

Class/Stage: 5	**Lesson/Period:** 6	**Lesson Length:** 55 mins			
STAGE OF LESSON	**TEACHER ACTIONS**	**STUDENT ACTIONS**	**QUESTIONING/ UNDERSTANDING?**	**TIME**	**RESOURCES**
1. LINKING -what have they already learnt? -assumed knowledge? -link to last lesson?	-Shoe Check -Call Roll Make sure that plunge router is available as well as examples of inlay panels	Change shoes if necessary		5mins	Roll
3.INTRODUCTION ✓Context of the lesson ✓Expected outcomes/goals ✓Key question/s	-Most people will be up to Gluing and clamping their side panel assy. If you have already done this, you are to plane or sand your glued assembly down so that it is flat and smooth with no 'steps' in the joins. Once you have done this I will demonstrate how to use the router	Students to listen	Is anyone stuck and need assistance?	5mins	

4. THE BODY ✓ Teacher directed learning? ✓ Independent student inquiry/ learning?	Let students continue on with gluing and clamping their assemblies. Show students who have finished gluing how to plane steps in joints down if required	Glue and clamp Sand and plane	Visually see if anyone needs assistance	20mins	Frame Biscuits Glue 2 sash cramps Wet rag Plane Sandpaper Sanding block
	When first student finishes: Call all students to middle of room for demonstration on routing the inside of their panel ready for the infill panel - Place jig on bench - Secure in vice - Use wedge to secure side assy into jig - Router to be measured for depth - Router edge – follow arrows on jig! - Don't put router down until bit has stopped - Chisel the corners	Watch	Students must decide on what infill panel they want as it will determine the depth you set the router to. Lining Board is 12mm Pine Ply is 7mm Luan is 4mm Router depth to be set : Material thickness plus 1mm	10mins	Plunge router Ruler Jig to hold assy Wedge Safety glasses Hearing Mallet Chisel
	Teacher to supervise students routing their panels	Students to continue on with side assy, wherever they're up to.	Watch that students are using correct PPE	10mins	

5. CONCLUSION ✓ Pack up and organise ✓ Summary of lesson ✓ Future directions/ linking to next lesson	Teacher to call pack up time Start delegating jobs such as sweeping Make sure all clamped jobs are away.	Students to put timber away Clean up room sweep		5mins	Broom
6. EVALUATION REFLECTION	• Were the students showing a good understanding of how to use the router? • Was the time management of the lesson OK? Did it run over or was it too short? • Is anyone lagging behind?				