








# Lanyon High School



## 9-10 Design and Technology - Woodwork 2024

Curriculum	Achievement standard	By the end of Year 10 students explain how people consider factors that impact on design decisions and the technologies used to design and produce products, services and environments for sustainable living. They explain the contribution of innovation, enterprise skills and emerging technologies to global preferred futures. For one or more of the technologies contexts, students explain the features of technologies and their appropriateness for purpose, and create designed solutions based on an analysis of needs or opportunities. Students create, adapt and refine design ideas, processes and solutions and justify their decisions against developed design criteria that include sustainability. They communicate design ideas, processes and solutions to a range of audiences, including using digital tools. Students independently and collaboratively develop and apply production and project management plans, adjusting processes when necessary. They select and use technologies skilfully and safely to produce designed solutions.	
Teaching and learning	Term overview	<p><b>Semester 1 and 2</b></p> <p><b>Unit Overview</b> Throughout the semester, students will have the opportunity to master technical drawing skills to industry standards. Opportunities to develop joint-making and construction abilities, focusing on precise measuring, marking, and cutting of timber using hand tools like pencils, tenon saws, planes, chisels will be presented. They also gain proficiency in machinery use, including disc sanders, drills, band saws, and wood lathes. Students practice cutting various timber joints, such as rebates, half laps, and dovetails, emphasizing safety and sustainability in their work</p> <p><b>Opportunities for student learning include:</b></p> <ul style="list-style-type: none"> <li>• <b>Understanding Materials:</b> Students learn about different types of wood, their properties.</li> <li>• <b>Safety Procedures:</b> Including the proper use of tools and equipment, handling of materials, and adherence to safety protocols.</li> <li>• <b>Design Process:</b> Students engage in the design process, reflecting and refining their designs based on feedback and evaluation.</li> <li>• <b>Technical Skills:</b> Students develop practical skills in woodworking techniques such as measuring, cutting, shaping, joining, and finishing wood.</li> <li>• <b>Problem-Solving:</b> Through hands-on projects, students encounter challenges and learn to problem-solve, troubleshoot, and adapt their approaches as needed.</li> <li>• <b>Environmental Awareness:</b> Students may learn about sustainable practices in woodworking, including the use of environmentally friendly materials, recycling, and minimizing waste.</li> <li>• <b>Historical and Cultural Contexts:</b> Students explore the historical and cultural significance of woodworking traditions, techniques, and designs.</li> <li>• <b>Collaboration and Communication:</b> Projects may involve collaboration with peers, teachers, and other stakeholders, requiring effective communication and teamwork skills.</li> </ul> <p><b>Understandings and skills</b></p> <ul style="list-style-type: none"> <li>• Production of working technical drawings that meet industry standards</li> <li>• Portfolio of skills- Continuation of development of joints and drawings</li> <li>• Construction Skills - Measuring, marking and cutting timber</li> <li>• Hand tool use - pencil, tennon saw, plane, chisel, mallet, Hammer, set square, marking gauge</li> <li>• Machinery use - disc sander, drill, press, band saw, wood lathe</li> <li>• Cutting a range of timber joints may include: Rebate, Half Lapped, Tee Halving, Dove Tee Halving, Pin joints, Dovetail, mortise and tennon.</li> </ul>	
	Cross curriculum priorities and General capabilities	 Literacy  Numeracy  ICT capability  Critical and creative thinking  Personal and social capability   Aboriginal and Torres Strait Islander histories and cultures	
Assessment	Evidence types Teachers will make judgements and provide feedback throughout the semester	Teachers make judgments about evidence of student learning against the Australian Curriculum achievement standard. During moderation processes, teachers engage in professional conversations to share their observations and judgments about evidence in student work. Schools and school clusters conduct moderation to improve the consistency, comparability and defensibility of teacher judgments, to ensure teacher judgments are as valid, reliable and fair as possible.	
		Week 1-2 and ongoing	Safety in and around the workshop/classroom.
		Week 5	Technical Drawing Portfolio.
		Week 6-7	Timber joint portfolio.
		Week 6 Term 2 and ongoing	Literacy tasks including an assignment on relevant Design and Technology topics, and student reflection.
		Week 8 Term 2 (To be assessed throughout time in workshop)	Timber projects (may include but not limited to, timber puzzle, boxes, turned timber projects).