

Lanyon High School



Digital Technologies 9/10

Curriculum	Achievement standard	By the end of Year 10 students develop and modify innovative digital solutions, decompose real-world problems, and critically evaluate alternative solutions against stakeholder elicited user stories. Students acquire, interpret and model complex data with databases and represent documents as content, structure and presentation. They design and validate algorithms and implement them, including in an object-oriented programming language. Students explain how digital systems manage, control and secure access to data; and model cyber security threats and explore a vulnerability. They use advanced features of digital tools to create interactive content, and to plan, collaborate on, and manage agile projects. Students apply privacy principles to manage digital footprints.			
Teaching and learning	Term overview	<p style="text-align: center;">Semester</p> <p>Unit Overview In Digital Technologies students focus on further developing understanding and skills in computational thinking such as precisely and accurately describing problems and the use of modular approaches to solutions. It also focuses on engaging students with specialised learning in preparation for vocational training or learning in the senior secondary years. Students will explore a variety of coding languages and develop digital solutions through a variety of areas such as , Game design , Web development and App Development.</p> <p>The unit will provide opportunities for students to:</p> <ul style="list-style-type: none"> • Work with increasing independence and develop the skills to be critical and reflective thinkers • Develop acquiring, managing and analytical data knowledge and understanding • Investigate and define real world problems • Build and develop skills through a range of techniques, processes and digital technologies • Design and generate digital solutions <p>Understandings and skills</p> <ul style="list-style-type: none"> • Decompose real-world problems through digital solutions • Design and Validate algorithms • Develop and modify digital solutions • Implement algorithms in an object-oriented programming language • Critical evaluation of solutions against criteria • Privacy principles 			
	Cross curriculum priorities and General capabilities	<div> Literacy Numeracy ICT capability Critical and creative thinking Personal and social capability Aboriginal and Torres Strait Islander histories and cultures </div>			
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	Major Assessment	Week	Major Assessment
		5	Digital Safety and Awareness	12	Game Review / Analysis
		8	Game/ Web/ App Design - Research, Development	15	Networks, hardware and design solutions
		10	Mid Cycle Digital Portfolio Review - Testing	17	Final Game/ Web / App presentation and sharing
		Ongoing	Students will be continually assessed throughout the semester on a variety of classwork and project based tasks.		