

## Varsity College Year 8 Digital Technology – Semester 2, 2024

Week	Date	Topics	Assessment
1	8-12 July Athletics Carnival - Wed	<ul style="list-style-type: none"> <li>Installation of Scratch and game design investigation</li> <li>Character investigation, design and drawing</li> </ul>	
2	15-19 July	<ul style="list-style-type: none"> <li>Game design investigation</li> </ul>	
3	22-26 July GC24 - Thursday	<ul style="list-style-type: none"> <li>Research and development of a scratch game plan in the form of an annotated, hand drawn story board</li> </ul>	
4	29 Jul- 2 Aug	<ul style="list-style-type: none"> <li>Research and development of a scratch game plan in the form of an annotated, hand drawn story board</li> </ul>	
5	5-9 August	<ul style="list-style-type: none"> <li>Scratch coding – generate efficient code using loops</li> <li>Scratch coding – generate codes using ‘while loops’</li> <li>Scratch coding – create and code variables</li> <li>Scratch coding – generate code to create clones of sprites which will move across the screen</li> <li>Scratch coding – incorporate sound effects</li> </ul>	
6	12-16 August GC24 Finals – Wed.	<ul style="list-style-type: none"> <li>Project development – identify the problem and develop a solution</li> </ul>	
7	19-23 August	<ul style="list-style-type: none"> <li>Project development – creating backgrounds sprites and code</li> <li>Annotate codes</li> </ul>	
8	26-30 August	<ul style="list-style-type: none"> <li>Project development – obstacle animation, scoring and sound FX</li> </ul>	Draft Due
9	2-6 September	<ul style="list-style-type: none"> <li>Project conclusion – game refinement and evaluation</li> </ul>	<b>Project Due Lesson 3</b>
10	9-13 September	<ul style="list-style-type: none"> <li>Peer review of games</li> </ul>	
<b>School holidays: Saturday September 14 – Sunday September 29</b>			
1	30 Sept – 4 Oct	<ul style="list-style-type: none"> <li>Introduction to robotics and build base bot</li> <li>Installation of software</li> </ul>	
2	7-11 October King's B'day PH - Monday	<ul style="list-style-type: none"> <li>Motors - Moves and turns</li> <li>Moving using seconds, degrees and rotations.</li> </ul>	
3	14-18 October	<ul style="list-style-type: none"> <li>Ultrasonic sensor - Objects and obstacles</li> <li>Using the ultrasonic sensor to detect objects and detect different distances.</li> </ul>	
4	21 - 25 October	<ul style="list-style-type: none"> <li>Claw - Grab and release</li> <li>Use the motor tool to move and release an object.</li> </ul>	
5	28 Oct – 1 Nov	<ul style="list-style-type: none"> <li>Colour sensor - Colours and lines</li> <li>Sensor calibration.</li> <li>Create a program that reacts to lines using the colour sensor.</li> </ul>	
6	4-8 November	<ul style="list-style-type: none"> <li>Gyro sensor - Angles and patterns</li> <li>Use the gyro sensor to move in patterns</li> <li><b>Classwork Due</b></li> <li>Introduction to robotics documentation</li> </ul>	
7	11-15 November	<ul style="list-style-type: none"> <li>Problem solving team challenge</li> </ul>	
8	18-22 November	<ul style="list-style-type: none"> <li>Problem solving team challenge</li> </ul>	
9	25-29 November	<ul style="list-style-type: none"> <li>Problem solving team challenge</li> </ul>	<b>Folio due Lesson 1</b>
10	2-6 December	<b>Alternative Program</b>	
11	9-13 December	<b>Supervision only week</b>	
<b>School holidays: Saturday December 14 – Tuesday January 28</b>			