Varsity College
Year 7 Digital Technology – Semester 2, 2024

Week	Date	Topics	Assessment
1	**8-12 July** **Athletics Carnival - Wed**	• Installation of Scratch and game design investigation • Character investigation, design and drawing	
2	**15-19 July**	• Game design investigation	
3	**22-26 July** **GC24 - Thursday**	• Research and development of a scratch game plan in the form of an annotated, hand drawn story board	
4	**29 Jul- 2 Aug**	• Research and development of a scratch game plan in the form of an annotated, hand drawn story board	
5	**5-9 August**	• Scratch coding – generate efficient code using loops • Scratch coding – generate codes using 'while loops' • Scratch coding – create and code variables • Scratch coding – generate code to create clones of sprites which will move across the screen • Scratch coding – incorporate sound effects	
6	**12-16 August** **GC24 Finals – Wed.**	• Project development – identify the problem and develop a solution	
7	**19-23 August**	• Project development – creating backgrounds sprites and code • Annotate codes	
8	**26-30 August**	• Project development – obstacle animation, scoring and sound FX	Draft Due
9	**2-6 September**	• Project conclusion – game refinement and evaluation	**Project Due Lesson 3**
10	**9-13 September**	• Peer review of games	
	School holidays: Saturday September 14 – Sunday September 29		
1	**30 Sept – 4 Oct**	• Introduction to robotics and build base bot • Installation of software	
2	**7-11 October** **King's B'day PH - Monday**	• Motors - Moves and turns • Moving using seconds, degrees and rotations.	
3	**14-18 October**	• Ultrasonic sensor - Objects and obstacles • Using the ultrasonic sensor to detect objects and detect different distances.	
4	**21 - 25 October**	• Claw - Grab and release • Use the motor tool to move and release an object.	
5	**28 Oct – 1 Nov**	• Colour sensor - Colours and lines • Sensor calibration. • Create a program that reacts to lines using the colour sensor.	
6	**4-8 November**	• Gyro sensor - Angles and patterns • Use the gyro sensor to move in patterns • **Classwork Due** • Introduction to robotics documentation	
7	**11-15 November**	• Problem solving team challenge	
8	**18-22 November**	• Problem solving team challenge	
9	**25-29 November**	• Problem solving team challenge	**Folio due Lesson 1**
10	**2-6 December**	**Alternative Program**	
11	**9-13 December**	**Supervision only week**	
	School holidays: Saturday December 14 – Tuesday January 28		