Varsity College
Year 9 Digital Solutions – Semester 2, 2024

Week	Date	Topics	Assessment
1	**8-12 July** Athletics Carnival - Wed	• Core coding concepts: sequence, selection, iteration and variables • Pseudocode and flowcharts	
2	**15-19 July**	• Course overview, importance of game design, and core elements (mechanics, story, aesthetics) • Game development lifecycle and exploration of game genres and categories	
3	**22-26 July** GC24 - Thursday	• In-depth exploration of game mechanics (movement, interaction) and setting game rules and objectives • Basics of GDScript: introduction, writing, and running simple scripts • Creating a simple game project with basic player controls and handling user input	
4	**29 Jul- 2 Aug**	• Designing game worlds in Godot: creating tilemaps, adding assets, and using the TileMap node • Advanced level design techniques, environmental storytelling, playtesting, and iteration	
5	**5-9 August**	• Basics of character creation, roles, and archetypes • Character creation in Godot: importing assets, creating, and managing animations	
6	**12-16 August** GC24 Finals – Wed	• Creating UI in Godot: using Control nodes, designing HUDs • Basics of audio design (music, sound effects, voice)	
7	**19-23 August**	• Advanced scripting in Godot: signals, callbacks, custom scripts, and reusable code • Finalizing game projects, incorporating feedback from playtesting	**Submission of assessment folio** **Lesson 3**
8	**26-30 August**	• Final presentations: showcasing games, receiving feedback, and discussing future improvements	
9	**2-6 September**	• Continued development, refinement, troubleshooting and playtesting	
10	**9-13 September**	• Continued development, refinement, troubleshooting and playtesting	
School holidays: Saturday September 14 – Sunday September 29			
1	**30 Sept – 4 Oct**	• Introduction to VEXcode programming software • Overview of VEX IQ parts and components • Build a basic robot using VEX IQ parts	
2	**7-11 October** King's B'day PH - Monday	• Introduction to manipulators and arms • Building robot to use a manipulator	
3	**14-18 October**	• Introduction to programming concepts such as loops and conditional statements • Programming a basic robot movement using VEXcode	
4	**21 - 25 October**	• Introduction to advanced programming concepts such as functions and variables • Programming a robot to perform multiple tasks using functions	
5	**28 Oct – 1 Nov**	• Introduction to autonomous programming • Programming a robot to perform tasks autonomously (navigation)	
6	**4-8 November**	• Programming a robot to perform tasks autonomously (motors) • Documentation of process	
7	**11-15 November**	• Programming a robot to perform tasks autonomously (sensors) • Documentation of process	**Submission of assessment folio** **Lesson 3**
8	**18-22 November**	• Present and demonstrate the final solution to the class • Documentation of process	
9	**25-29 November**	• Review and refine final solution	
10	**2-6 December**	**Alternative Program**	
11	**9-13 December**	**Supervision only week**	
School holidays: Saturday December 14 – Tuesday January 28			