**Game Design**

**GD1.0 Year 1 - Game Basics with Game Maker / Year 2 - Getting Started with Blender 3D.**

1.1 Year 1 - Demonstrate the ability to add sprites.

Year 2 - Learning the interface.

1.2 Year 1 - Demonstrate the ability to create objects.

1.3 Year 1 - Demonstrate the ability to add sounds.

**GD2.0 Year 1 - Interactivity and Scoring / Year 2 - 3D Modeling**

2.1 Year 1 - Demonstrate interactivity between objects.

Year 2 - Modeling and combining basic shapes into complex ones.

2.2 Year 1 - Demonstrate winning and losing.

Year 2 - Basic character modeling.

**GD3.0 Year 1 & 2 - Animation**

3.1 Year 1 - Demonstrate the ability to animate characters.

Year 2 - Key frame and Cyclic Animation.

3.2 Year 1 - Demonstrate the ability to create test environments.

Year 2 - Working with rigging.

3.3 Year 2 - Using armatures in characters.

**GD4.0 Year 1 - Inheriting Events / Year 2 - Materials**

4.1 Year 1 - Create menu and ending screens.

Year 2 - Texturing using cycles.

4.2 Year 1 - Demonstrate the ability to create bouncing objects.

Year 2 - Create Realistic Materials.

4.3 Year 1 - Understand parent power.

Year 2 - Create a realistic model with textures and nodes.

**GD5.0 Year 1 - Maze Games / Year 2 – Lighting and Rendering**

5.1 Year 1 - Demonstrate the ability to use grids.

Year 2 - Create and render a realistic object.

5.2 Year 1 - Create game hazards.

Year 2 - Light the realistic object created previously.

5.3 Year 1 - Demonstrate the use of tiles.

Year 2 - Demonstrate use of camera movement.

**GD6.0 Year 1 - Multi-player Games / Year 2 – Dynamics and Physics**

6.1 Year 1 - Demonstrate the use of cooperative players.

Year 2 - Particle movement.

6.2 Year 1 - Demonstrate the use of competitive players.

Year 2 - Blast effects.

6.3 Year 1 - Demonstrate the use of variables.

Year 2 - Water simulation.

6.4 Year 1 - Demonstrate the use of time lines.

6.5 Year 1 - Demonstrate the proper use of views.

**GD7.0 Year 1 - Developing Original Games / Year 2 - Game Engine**

7.1 Year 1 - Demonstrate the ability to create an isometric environment.

Year 2 - Create a simple game character.

7.2 Year 1 - Demonstrate the ability to create a first-person environment.

Year 2 - Create a simple game environment.

7.3 Year 1 - Analyze a game for errors.

Year 2 - Add characters to the game environment.

7.4 Year 1 - Demonstrate the ability to create a 3-dimensional environment.

Year 2 - Make a playable 3D game environment.

7.5 Year 1 - Demonstrate the proper use of textures.

Year 2 - Make a working 3D game.