

# Unity 1 Course Syllabus

## Objectives

Unity 1 gives students a concrete understanding of the powerful Unity Editor and concepts that control the engine. These skills form a baseline to continue work in Unity, as they provide students with fundamental knowledge of Unity's processes and principals. In this course, students can express their creativity by creating their own games and projects using Unity's massive arsenal broken down into multiple modules.

## Module Topics:

1. Introduction To Unity - Using Github to clone cloud repositories on to your local machine, getting familiar with basic Unity tools and windows, adding and manipulating various Unity Components on GameObjects
2. FPS - Create interactive First Person Shooter games with various different Unity GameObjects and Components such as Lighting, Texturing, Audio, Player Input, and Simple Animation.
3. Game Enviroments and Objects - Improve game graphics through the Unity Terrian Tool and use provided scripts to preform base line game functions.
4. UI Elements and Scene Management - Understand Unity User Interface elements such as Canvas, Panel, TextMeshPro, and Button, as well as how to control scene changes from within the Unity Build Manager.

## Lesson Breakdown

Module 1	Topic - Introduction To Unity
1-0	Introduction to Unity 1
1-1	Intro to GitHub
1-2	Getting Familiar
1-3	Components & GameObjects
1-3 Project	Mini Project 1: Speedball
1-3 Project	Mini Project 2: Ball Drop

Module 1	Topic - Introduction To Unity
1-4 Project	Final Project: Roll a Ball

Module 2	Topic - FPS
2-0	First Person Games
2-1	Lighting and Texturing
2-2	Asset and Package Manager
2-3	First Person POV
2-4	Audio and Input
2-5	Navigation and Animation
2-6 Project	MiniProject 1: First Person Platforming
2-6 Project	Mini-Project 2: Shoot and Throw
2-7 Project	Final Project: FPS Game

Module 3	Topic - Game Enviroments and Objects
3-0	Shaping an Environment
3-1	Terrain and Its Tools
3-2	Appearing/Disappearing UI-Text
3-3	Checkpoints
3-4	Positioning Camera
3-5	Importing 2D Textures
3-6 Project	Mini Project: Exploration Platformer
3-7	Final Project: Car Racer

Module 4	Topic - UI Elements and Scene Management
4-0	User Interface Elements and Scene Management
4-1	UI Elements
4-2	UI Elements Continued
4-2 Project	Mini Project: Tic Tac Toe
4-3	Build Settings and Changing Scenes
4-5	Turtle Shapes
4-5 Project	Final Project: Menu Creation