

Roblox 1 Course Syllabus

Objectives

This course provides a basic overview of Roblox Studio and scripting techniques written in Lua, using various practical application examples to demonstrate what you can achieve on this game engine. By the end of this course, students will have an understanding of basic programming and design principles in Roblox Studio to be able to build their own game. The objectives of this course include:

1. Basic understanding of Roblox Studio
2. Understand the principles of game design
3. Understand how modern games are architected
4. Build functional and fun maps using scripts and models

Lessons below aim to be read the following way:

Lessons

e.g. L1-1 Basic Controls.md, L2-1 Solid Modeling.md, and L3-1 Constraints.md

These sections are meant for students to read and to understand the concepts of that particular module before jumping into some projects.

Exercises

e.g. L1-1 Exercises.md, L2-1 Exercises.md, and L3-1 Exercises.md

These sections are meant to be completed as the first exercise introduction to the main topic, after students have gone through the prior lesson. Students should do this before they tackle the projects.

Project Lessons

e.g. L1 Project 1 Clock Tower.md, L2 Project 3 Giant Teddy.md, L3 Project 3 Hot Tub.md

Every module has at least 3 projects to choose from. Students are **not** required to do all the projects and we typically suggest doing 1 or 2. However, if they are interested in the material they can do as many as they please.

Topics and Schedule

| Module | Topics | Description |
|----------------------------|--|--|
| 1 Basic Controls | Clock, Snowman, Room, Octopus, Tree, Ball Pit | An introduction to basic controls making simple models. |
| 2 Solid Modeling and Parts | Slide, UFO, Teddy | An introduction to modeling. |
| 3 Constraints | Bridge, Sign, Trap | An introduction to Constraints which includes but is not limited to: Hinges, Welds, Rope, Spring. |
| 4 Effects | Lamp, Cauldron, Tub, Rainbow | An introduction to Effects which includes but is not limited to: Fire, Smoke, Sparkles, Beams. |
| 5 Windows | Windows | An introduction to the use of Windows and organization on Roblox Studio. |
| 6 Terrain | Valley, Island, Volcano, Arctic | An introduction to the use of terrain editing tools. |
| 7 Tools | Lantern, Lightsaber, Paintbrush | An introduction to what tools are. |
| 8 Accessories | Spirit, Glasses, Mask | An introduction to accessories, objects which can be worn by players, hats, capes and glasses to name a few. |