# Coding Mind

# Roblox 2 Course Syllabus

## Objectives

This course provides an intermediate 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 additional understanding of programming and design principles in Roblox Studio. The objectives of this course include:

1. Intermediate understanding of Roblox Studio
2. Beginner programming and design principles
3. Intermediate understanding of 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.

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## Topics and Schedule

| Module | Topics | Description |
|--------|--------|-------------|
| 1 Variables | **Speed-Jump, Traffic, Cloning** | An introduction to variables. |
| 2 Loops | **Music, Day-Night, Elevator** | An introduction to for and while loops. |
| 3 If Statements | **Light, Potato, Dice** | An introduction to if statements. |
| 4 Touch Events | **Puffer, Shroom, Trampoline, Lava-Obby** | An introduction to coded events that trigger when a player touches an object. |
| 5 Tool Activation | **Bomb, Potion, Floating** | Advanced scripting for tools characters hold. |
| 6 Click Detectors | **Painter, Gravity, Lava** | An introduction to coded events that trigger when a player clicks on an object. |
| 7 Key Binding | **Explode, Antman, Air Head** | An introduction to key binds. |
| 8 Game Chat | **Godly, Apocalypse, Chat Wars** | An introduction to chat activated events. |