

Learningscalator Scratch for Beginners Course

August 10-12, 2021

Course Objectives and Rationale:

Welcome! This course is designed for students who have little or no experience with computer programming but are interested in picking it up. This course will be very interactive and hands-on, and it can also prepare for the newly added computer programming course in the Ontario education curriculum.

Learning Points:

- Sprites/backdrop/costume designs
- Motion
- Loops
- Sounds
- Events
- If/else
- Logical operations
- Variables

Class Format:

In this course, we will mainly be learning through creating projects, such as designing an interactive game using Scratch. Each day, we will be creating a mini-project together.

Here are some potential projects that we can create as a class:

Project	Learning Points
Chicken in Space	Sprites/backdrops, motion, loops, events, sounds
Maze Game	Sprites/backdrops, motion, loops, events, if/else
Snake Game	Sprites/backdrops, motion, loops, events, if/else, variables, operations
Fruit catch game	Sprites/backdrops, motion, loops, events, if/else, variables, operations
Paddle/ball bounce game	Sprites/backdrops, motion, loops, events, if/else, variables, operations

Optional homework will be assigned every day based on what we learned in class, and it is recommended for students to try it out. The homework will leave a lot of room for students to be creative and implement their own ideas into the projects. At the beginning of each class, we will spend around 15 minutes going through the homework from the previous day, so students are definitely welcome to share and present their solutions at this time.