Course Overview: Creative Coding with Games and Apps

*Creative Coding with Games and Apps* is an introduction to programming and computer science concepts for everyone. In this class, you will learn to design, program, and publish games stored in the cloud that run on any platform. You will learn coding skills using TouchDevelop, an easy to learn and powerful programming language developed by Microsoft.

In this course, you'll explore these questions:

Unit 1: How do I make games using TouchDevelop? What makes them fun?

Unit 2: How do I use randomization in my games to increase the challenge?

Unit 3: How do I make my games interact with the player?

Unit 4: How do I make my games smarter?

Unit 5: How do I add special effects to my games?

Unit 6: How do I create my own games? How do I share them with the world?

Unit 7: How do I create animations?

Unit 8: How do I make more efficient use of code?

Unit 9: How do I use “the cloud” to build multiplayer games?

Unit 10: How do I build apps, instead of games?

Unit 11: How do I protect information in games and apps?

Unit 12: How do I work as part of a team to design, create, and market a game or app?

**Note**: Depending on the length of your course, you may not cover all 12 units.

Keys to success:

Be creative.

Work hard to learn basic computer science concepts using tutorials, watching videos, and completing hands-on exercises.

Complete all tutorials with concentration and patience.

Pay close attention to the tutorial videos.

Review the tutorials as many times as needed to complete the challenges and activities.

Help each other to be good team members in collaborative activities.

Be patient with yourself and each other. You are learning.

Be curious. Try new things.

Respect the classroom, materials, the teacher, and your fellow students.

Collaboration is important for succeeding in this class. Work hard to develop the necessary skills to be a good team member.

Be an active learner every minute of every class. There are many, many opportunities in this class. Challenge yourself.

Explore TouchDevelop. Be an independent learner. Experiment. Discover something new and share it with the entire class.

A note on participation

Your success will be a direct result of your participation.

Work hard. Do your best. Have fun.

Grading

Class participation

Independent and group activities

Quizzes

Projects