

# Syllabus

## Introduction to Computer Science- Semester 1

### **Introduction to Computer Science - Semester 1**

This is an engaging, very hands-on introduction to computational thinking and programming concepts. Each of its six units culminates in a comprehensive project, and roughly 75% of student time is spent building programs and practicing the skills they are learning. Intro to CS 1 uses SNAP!, an approachable visual block-based programming language with an easy to use set of tools. It's designed for introducing students from a wide range of backgrounds to coding for the first time. Many of the projects involve building artistic animations or games like "pong", hangman, space invaders, or SuperMario. All encourage creativity and integrating students' own interests to build fun and unique programs.

#### **Prerequisites:**

- Middle school level math (Grade 8 common core), especially: arithmetic expressions, basic equations, geometric shapes and basic formulas, x/y graphs
- Basic computer skills - keyboard/mouse, web browser, email, discussion boards