**Python Programming**

**Instructor: Shujun Li**

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**Class time:** 11:10am-12pm

**Prerequisites and restrictions:** Grade 3 math (fractions, geometry, etc.)

**Course summary:**

This course introduces computer programming using the Python programming language and offers hands-on experience in coding and debugging. The focus is on fundamental programming concepts, which are universal for most, if not all, programming languages .

**Topics:**

Introduction to computers; introduction to programming Variables

Basic data structures Input & output

Control flow: if and else Control flow: looping Functions and modules Programming exercises

Classes and objects (optional for advanced students)

Programming projects using Pygame (optional for advanced students)

**Textbooks:**

Recommended: Python for Kids: A Playfu l Introduction to Programming by Jason

R. Briggs. 2013.

Optional: Python Crash Course : A Hands-o n Project-based Introduction to Programming by Eric Matthes. 2016

**Requirements:**

Students need to bring a laptop for in-class programming exercises.