



Course Syllabus

Python Programming | Summer 2022

Objectives:

- Exposure to Computer Science through practical application and programming
- Introduce main concepts/ideas of Python

Prerequisites: None required. Familiarity with the basics of programming logic is recommended. No prior Python experience is required

Instructor Contact Information:

Primary Instructor: HyeJeong Yun

hyejeong.yun@fremontstem.com

Website:

All course materials (waiver, syllabi, etc.) will be posted on the course “Python Programming.” on Google Classroom.

Class Times:

Lecture: Tuesday & Thursday 3:00 PM - 5:00 PM

Additional Help: Questions can be posted to the Google Classroom or sent via email. If questions require sharing code, please make a private question with the code on Google Classroom or via email.

Required Materials:

- Students are required to bring laptops, notebooks and writing utensils to class every lecture.
- Jupyter Notebook. This is the IDE we will be using throughout the course
- Links to PDFs and online resources will be provided in class. Note: Purchase of a computer science textbook is NOT required for participation in the course. All necessary materials will be provided throughout the course.

Reference Material:

- <https://stepik.org/join-class/d72af0b1281ede748abc2b7b2a9d884dc0f24349>
- www.automatetheboringstuff.com/?fbclid=IwAR28d0TtUPFcjhTy99tB7FxHsU93XQGQO0TSblluaLrr5GW9BtZqqlUxVFg#toc

Homework: Homework that is assigned is strongly recommended. Answer keys will be available online the day the homework assignment is due. For help on practice problems, feel free to email the instructor.

Grading: Reading Quizzes 10%, Attendance/Participation 10%, Labs 10%, Programming Assignments 40%, Final 30%



Tentative Nature of the Syllabus: The contents of this syllabus and attached schedule are tentative in nature and may be subject to change or revision. The instructor holds the right to make changes to the schedule and/or organization of the class as necessary. Students and parents will be identified of any changes via email.

Academic Integrity: Students are expected to submit their own work to each assignment that is an honest and fair representation of their knowledge and abilities at the time of submission. Sharing ideas or explaining concepts with other students is allowed, but do not share your code with each other before the assignment is due.

Special Accommodations: If your student requires special accommodations, please notify the instructor as soon as possible.

Tentative Schedule *Assignments are noted in italics.*

Date	Lesson	Topic + Reading
Week 1: 6/21 (Tue)	1	Introduction & Python Basics <i>Stepik 1.1-1.5</i>
Week 1: 6/23 (Thu)	2	Functions, Flow Control (up to While loops) <i>Stepik 1.6-2.2, 4.3, 4.4</i>
Week 1: 6/28 (Tue)	3	Lists, Flow Control Cont' <i>Stepik 2.3, 2.4, 3.1-3.3</i>
Week 2: 6/30 (Thu)	Lab	Workshop & Lab, <i>PA 1 Released</i>
Week 2: 7/5 (Tue)	4	References, Methods, Manipulating Strings <i>Stepik 4.1, 4.2</i>
Week 2: 7/7 (Thu)	5	Incremental Coding, Iterative Development, Testing, and Debugging <i>Stepik 5.1-5.4</i>
Week 3: 7/12 (Tue)	6	Dictionaries and Structuring Data, <i>PA 1 Due</i> <i>Stepik 8.1, 8.2</i>
Week 3: 7/14 (Thu)	7	Nested For Loops and 2d Lists <i>Stepik 6.1, 6.2</i>
Week 3: 7/19 (Tue)	Lab	Workshop & Lab, <i>PA 2 Released</i>
Week 4: 7/21 (Thu)	8	Images and Tuples <i>Stepik 6.3, 6.4</i>
Week 4: 7/26 (Tu)	9	Modifying Images in Functions, <i>PA 2 Due</i> <i>Stepik 7.1-7.4</i>
Week 4: 7/28 (Thu)	Lab	Final Exam & Review

**Note: Schedule is tentative in nature and subject to change at the instructor's discretion.*