

AP Computer Science Principles  
Introduction to Python  
Lesson Plan: Week 4 Day 1-5

Week 4 Day 1 - 5

IOSWBAT: Create a program in Python that meets all of the requirements for the Unit Project:

- Takes input from the user
- Generates at least one random number and makes meaningful use of the random number(s)
- Includes at least one list and makes meaningful use of the list(s)
- Includes at least one student-created function that takes in at least one parameter
- Includes at least one call to the function(s) above
- Provides output that changes depending on user input

Standards: 9-12.CT.7 Design or remix a program that utilizes a data structure to maintain changes to related pieces of data.

9-12.DL.2 Communicate and work collaboratively with others using digital tools to support individual learning and contribute to the learning of others.

This week is devoted to students completing the Unit Project. Each day, the teacher will have 1 – 3 groups share out about their project: describe the topic/what the program is meant to do, describe the difficulties they are encountering, and ask the group for feedback, assistance, and ways to improve their project. These presentations will be “sprinkled in” throughout the period one at a time to provide a quick break from work time but not interfere with progress. On the final day, groups will present/demonstrate their completed projects and submit their work.

**Day 1:** Groups make their final decision on a topic and plan out their project

**Day 2:** Groups work on their project and participate in other group’s presentations as active audience members.

**Day 3:** Groups work on their project and participate in other group’s presentations as active audience members.

**Day 4:** Groups work on their project and participate in other group’s presentations as active audience members.

**Day 5:** Groups present/demonstrate their completed projects and submit.