

AP Computer Science Principles
Introduction to Python
Lesson Plan: Week 3 Day 4-5

Week 3 Day 4 - 5

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

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.

Day 4:

Aim: How should we form groups for our Unit Project?

Do Now: Turn and Talk: What do you think should be considered when choosing a group to work with?

Class Discussion: What do you think should be considered when choosing a group to work with?

Allow students to lead the discussion, but ensure that the following points are addressed:

1. Group members should have similar interests (every group member needs to be interested in the selected topic for the group's project)
2. Group members should have complementary skill sets (i.e. not all with the same strengths and weaknesses)
3. Sometimes friends don't work well together
4. Sometimes you work best with people you are not necessarily friends with
5. Group members need to hold one another accountable for project work

Introduce the Unit Project:

1. Discussion: ask students what they remember about the assignment for the Create Performance Task from the AP Test.
2. Introduce the Unit Project. Have students read the Unit Project Assignment Document.
3. Answer any questions the students have regarding the Unit Project.

Brainstorm Topics for the Unit Project:

Have students individually brainstorm a list of 3 – 5 potential topics for the Unit Project and be prepared to share.

Day 5:

Aim: How should we form groups for our Unit Project?

Do Now: Turn and Talk: What questions do you still have about the Unit Project?

Form Groups for the Unit Project:

1. Have each student give a brief presentation (60-90 seconds) describing their 3 best ideas for the Unit Project, the strengths they bring to a group, and the things they need help with from their group.
2. Have students mingle around the classroom and discuss their ideas and individual strengths/weaknesses to form groups for the Unit Project.
3. Once the groups are formed, have each group work together to select the topic for their Unit Project.