



Sherman Oaks Center for Enriched Studies

AP Computer Science Principles

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“Code.org’s Computer Science Principles (CSP) curriculum is a full-year, rigorous, entry-level course that introduces high school students to the foundations of modern computing. The course covers a broad range of foundational topics such as programming, algorithms, the Internet, big data, digital privacy and security, and the societal impacts of computing.”

Summer Assignment 2019-2020 [Due August 20th]:

Your summer assignment is based on programming using App Lab and JavaScript. All the directions are provided in each lesson (Read them thoroughly). If a lesson includes a worksheet, you may work on them however they will not be collected.

- Go to <http://studio.code.org/join/JLGNXV> Use your mymail email account to sign up for code.org.
 - You are responsible to know your district ID and PIN to reset your mymail account. (If needed, go to mylogin.lausd.net to reset your password.)
- Your display name must be your full first and last name to receive any credit for your summer assignment.
- **Complete all puzzles* for Unit 3 Introduction to Programming Lessons 4, 5, 6, 7, 8, 9**
- **Complete all puzzles for Unit 5 Building Apps Lessons 1, 2, 4, 5, 6, 8, 9, 11, and 12**
 - To access Unit 5, click on the purple box titled “Computer Science Principles (18’-19’)” under the My Courses heading on the Dashboard page. Or when you are in Unit 3 click on “Computer Science Principles (18’-19’)” near the top left-hand corner to access all the units.
- Please come by room 104 before the last day of school if you are unsure how to navigate the code.org website and/or are experiencing difficulties logging onto their website.
- **All students enrolled in AP CSP will be tested on Unit 3 and Unit 5 once school is back in session in August.**

*Puzzles look like the following image. It appears on at the top of the site. A green colored shape means you have completed that puzzle:



It is suggested you complete about two lessons per week over a 7-week period to maintain a good pace. Please do not wait till the last few days before school begins. Some lessons have several puzzles to complete. You are expected to read each lesson overview and understand the concepts of programming, abstractions, and algorithms by the time you return to school in August.

Code.org implements App Lab and JavaScript for students to learn programming. Students do not need to know a specific programming language for the AP exam.

It is my expectation every student in the class is going to take the AP exam for the course in May. Please be aware with the new AP changes, you will need to decide if you are taking the exam sometime in October/November 2019 instead of February/March 2020.

Syllabus: <https://code.org/files/CSPSyllabusMay2018.pdf> (Tentative)

Curriculum: <https://curriculum.code.org/csp/>

Suggested reading: *Blown to Bits* [Free download: http://www.bitsbook.com/wp-content/uploads/2008/12/B2B_3.pdf]

The AP Assessment consists of a 74-question multiple choice exam (60% of total score) and two “through-course” assessments called Create Performance Task (24% of total score) and Explore Performance Task (16% of total score).

The breakdown of the 74 multiple choice questions on the AP exam:

- Algorithms (Big Idea 4) - 15 questions
- Programming (Big Idea 5) - 15 questions
- Abstraction (Big Idea 2) - 14 questions
- Data and Information (Big Idea 3) - 13 questions
- The Internet (Big Idea 6) - 10 questions
- Global Impact (Big Idea 7) - 7 questions

Creativity (Big Idea 1) is not tested on the end-of-course exam.

<https://apstudent.collegeboard.org/apcourse/ap-computer-science-principles/course-details>

The tasks descriptions can be found in the official AP CS Principles Exam and Course Description

<https://secure-media.collegeboard.org/digitalServices/pdf/ap/ap-computer-science-principles-course-and-exam-description.pdf> Look up “AP CSP course description” on Google if you do not want to type that long link.

- Create Performance Task (p. 108)
- Explore Performance Task (p. 111)

****Sample exam questions are provided on page 85-103. Go over them during the summer****