

AP Computer Science Principles Application

2020-21 School Year

Course Overview

The Advanced Placement Program enables a student to take a college level course while still in high school. The AP Computer Science Principles course is designed to be equivalent to a first-semester introductory college computing course.

Please familiarize yourself with the curriculum of this course by visiting the following links:

- 1. <https://youtu.be/S1vFrz4NETg>
- 2. <https://secure-media.collegeboard.org/digitalServices/pdf/ap/ap-computer-science-principles-course-overview.pdf>
- 3. <https://codehs.com/info/curriculum/apcsp>

Next, please read the following prerequisites and expectations for the course. Both the student and parents must sign that they understand the expectations before the student will be allowed to take the course.

Prerequisites

- It is strongly recommended that students complete Algebra I with a final grade of B or higher prior to enrolling in this course.
- Students must have strong writing skills in place, and must **request an evaluation from their English teacher**. This request should be made respectfully through email, and the email should be copied to rebeccastacey@mckeelschools.com. The teacher will then be provided with the link for the recommendation.
- Candidates must submit an **original** artifact (a visualization, a graphic, a video, a program/app, or an audio recording) which addresses the following prompt: **How can Computer Science change the world?**
- This artifact should highlight your creativity with a computer and should show the best, most careful work you are capable of. Acceptable multimedia file types include .mp3, .mp4, .wmv, .avi, .mov, .wav, .aif, or .pdf format. PDFs must not exceed three pages. Video or audio files must not exceed 1 minute in length and must not exceed 30MB in size. Web links are also acceptable submissions providing that you can prove that you are the creator of the content.
- Please include the following written information:
 - (150 words or less) Describe the development process of this artifact, identifying the computational tools and techniques used in its creation. The description should be detailed enough that someone unfamiliar with them could understand your process.
 - (250 words or less) Explain at least one beneficial effect and at least one harmful effect Computer Science has had, or has the potential to have, on society, economy, or culture.
 - Completed artifacts and written responses must be submitted through email to rebeccastacey@mckeelschools.com by 3/20/2020.

Expectations

Homework/Pace/Grading

- Because it is a college-level course, the pace will be quick. Students will need to be consistently attentive and on task. **Many students have the tendency to be off task when using an electronic device. Those students will have difficulty keeping up with the college-level pace of the curriculum.**
- Students must be willing to work diligently on all assignments. Students who manage their class time effectively will have very little homework. Students who cannot manage their time effectively will quickly fall behind.
- Attendance in each class is vital. Students who are absent frequently may struggle.
- It is expected that the students will do their assignments promptly. **Many students are accustomed to submitting late work and receiving feedback and/or credit. This may not be the case in AP CSP.**
- **It is vital that students be self-directed problem solvers. Students will routinely deal with frustrating problems in their research, coding, and project design. They must be able to deal with this frustration effectively and proactively. They may need to spend a great deal of time on a particular aspect of their program before it is what they want, so perseverance is a must!**

The AP CSP Exam

- The course will require students to create an online digital portfolio with the College Board and submit two performance tasks throughout the year, one per semester. The deadlines are hard and fast, there can be no late submission of these projects. Failure to turn in a performance task on time will result in being dropped from the course.
- The course will conclude with a 2-hour multiple choice final exam in May.

Equipment

It is best, although not required, that students have access to a laptop or desktop computer at home so that they can work there when necessary.

Summer Preparation

Students will receive information about required summer work upon their acceptance.

If both the student and the parents understand these expectations and are committed to the effort necessary for succeeding in AP CSP, please sign below, complete the information, and return to Mrs. Stacey by 3/20/2020.

Please make a copy for your records

Student (Print) _____

Student(Sign) _____ Date _____

Parent(Sign) _____ Date _____

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Original program submitted to Mrs. Stacey: Yes / No  
If yes, date: \_\_\_\_\_

Math Teacher Recommendation requested: Yes / No  
If yes, date: \_\_\_\_\_