

## AP Computer Science A Syllabus

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A message from me:

Computer Science is probably one of the most important classes you can take. The ability to program will make you successful in any field and help open opportunities for you in the future. If this class is your first time programming, it can be very difficult. This class will help you retrain your brain and you will learn to think about problems in new ways. You will learn to solve problems, break things into easily manageable pieces, and how to struggle and persevere.

Quick side note, I failed a computer science class in college. Sometimes it just takes a lot of effort to become good at something. Let's all practice and be successful together this year.

### Actual information

Every AP class has an exam guide. The guide for this course can be found here:

<https://apcentral.collegeboard.org/pdf/ap-computer-science-a-course-and-exam-description.pdf?course=ap-computer-science-a>

You should make yourself familiar with this document for any AP class you are taking.

A more in-depth breakdown of the topics can be found in the guide but an overall outline is below.

Units	Exam Weighting
<b>Unit 1: Primitive Types</b>	<b>2.5–5%</b>
<b>Unit 2: Using Objects</b>	<b>5–7.5%</b>
<b>Unit 3: Boolean Expressions and if Statements</b>	<b>15–17.5%</b>
<b>Unit 4: Iteration</b>	<b>17.5–22.5%</b>
<b>Unit 5: Writing Classes</b>	<b>5–7.5%</b>
<b>Unit 6: Array</b>	<b>10–15%</b>
<b>Unit 7: ArrayList</b>	<b>2.5–7.5%</b>
<b>Unit 8: 2D Array</b>	<b>7.5–10%</b>
<b>Unit 9: Inheritance</b>	<b>5–10%</b>
<b>Unit 10: Recursion</b>	<b>5–7.5%</b>

## Required items-

- If possible, access to your own laptop would be helpful. It does not matter if it is a Windows, Mac, or Linux based computer. Chromebooks could also work. We will work on the specifics during class.
- A phone, camera, or scanner

## Grading- Your grades will be weighted as follows:

- Exams (30%)
- Quizzes (15%)
- Assignments (15%)
- Programming Projects (20%)
- Final (20%)

Exams – Exams will be modelled after previous AP tests. We will try to emulate the real test as much as possible throughout the year to make it easier.

Quizzes – quizzes will be given through AP Classroom, through teams, or in class. All quizzes will be open notes and I encourage you to work together to ensure you understand the material. They will be hard. Instructions on how to sign up for AP classroom will be made available during class.

Assignments – all assignments given in Teams must be completed as soon as possible when they are assigned. You will quickly fall behind if you do not work on the material.

Extra credit- the tests and quizzes will be graded based on a slight curve. Extra credit will be given to anyone that scores higher than the curve on quizzes and tests. Extra credit will also be given for completing extra practice exams at the end of each semester. If you show you are able to pass the AP test, your grade will go up.

Cell phones- if possible, please make sure you have your cell phone available during class. It may be hard to see the board during class due to seating assignments. I will stream all work I do on the board so you can see from your desk. Laptops are cool too.

Make up exams- if you miss your exam time or are unhappy with your score, I am happy to make a more difficult exam and replace your grade. Please let me know and we can get your grade fixed.