

## Computer Science II 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

This class is meant to bridge AP Computer Science Principles and AP Computer Science A. If you complete all three courses before graduating, you can complete a CTE course sequence and receive college credit. For many of you, I just invited you to a class to learn programming that wasn't incredibly demanding. If you find yourself really liking programming, please continue on to AP CS:A where you can receive credit for CS 135. I hope you grow to like computer science through this course.

We will be learning Python as it is a relatively easy language to learn. After mastering the basics of programming in Python, I have a whole slew of fun activities planned. We will learn Cybersecurity, Machine Learning, and Robotics.

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 (25%)
- Quizzes (10%)

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

Exams – Exams will test basic programming skills. My goal is for you to learn the material throughout the year so retakes will always be available.

Quizzes – quizzes will be short questions about topics we just learned. You should expect about one a week just to make sure you are following along and learning. Retakes will always be available.

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- this class is about exploring computer science. You may take on extra projects outside the assigned material for extra credit. Discuss your options with me. I would hope you find something you are interested and passionate about to work on but I can always provide ideas as well.

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.