Computer Programming, Mr. Hays 2023-2024

Welcome!

This course is an introduction to computer programming, a fun class where you will be exposed to several different programming systems in a non-threatening environment. Four of the units we will do are:

- **Python**, a widely used and popular open source programming language (www.python.org).
- **Scratch** (http://scratch.mit.edu/), which offers a graphical interface to programming and easy to master graphics components.
- **Arduino** microcontrollers (www.arduino.cc) using Processing, a language that has roots in Java, an industry standard. Arduinos are computing devices which interact with the physical world through sensors and switches using electronics.
- **Micro:bit**: small programmable microcontrollers that we program using Python.

This is a beginning programming class: even if you have never programmed before you can succeed alongside students with more experience or interest. Nearly every assignment provides opportunities to do self-directed extensions and explorations.

Students wishing to be part of a more focused and challenging programming class are encouraged to consider AP Computer Science A, also offered at Analy High School. The AP class is taught in Java. For more information, talk with Mr. Hays.

Expectations

- Arrive prepared.
- Store your cell phone in the correct numbered pocket up front when you come in each day.
- Participate! If you need help, ask for it.
- Put in your best effort.
- Follow school rules.
- Be respectful of everyone.
- Use appropriate language.
- Help maintain a productive learning environment.
- Abide by our class honor code (see next page for more info).

Please follow school rules, be respectful of everyone, use appropriate language and help maintain a productive learning environment.

Grading

The majority of your grade will be based on you completing our class assignments as well as tests, quizzes and some individual projects. The grading breakdown is to the right.

Assignments:	70%
Tests and quizzes:	25%
Final exam:	5%

Tests and Quizzes: The following are rules for taking quizzes, tests, or exams in this class:

1. You may access your notes, previous assignments, and class videos and resources. You may not, however, access material on the broader Internet such as programming forums or other programming resources and you may not communicate with live people or your classmates (for example by chat, email, your phone, etc.)

2. You must do your own work.

Honor Code: I encourage you to work together and help each other on assignments and I expect and require that you complete your own work in the end. Your assignments should not look exactly like anyone else's. Copying other people's work and claiming it as your own is cheating and will result in a cheating referral to the administration and a lower grade in the class. It is very easy to copy someone else's code from one window and paste it into your code, then turn it in, but this is unethical and dishonest. It might also seem OK at first glance to work with classmates on a shared document, getting an assignment done, but that is not allowed. You must each do your own work!

Each student is required to sign a class honor code promising to do their own work for this class.

Google Classroom: I use the Google Classroom to post assignments, announcements and resources. I also post information on my web site: www.dogatemyhomework.com .

Cell Phones: Cell phones are awesome. They are also a tremendous distraction during class. Because of that all students will silence their phones and store them in the numbered pockets at the front of the classroom for the entire period.

Video Games: I do not allow students to play or watch video games or YouTube content unrelated to school at any time, even if you are done with all assigned work. If you finish your work early and have free time, you may work on homework for another class, work on your own personal projects, learn a new skill, or sleep.

Bathroom breaks/Hall pass: I let one student at a time out of the room to use the bathroom. There is a hall pass that you need to bring with you. Please also sign in and out on the sheet by the door. I expect you to return within 5 minutes.

Contact Info

The best way to contact me is by email: whays@wscuhsd.org. My classroom phone number is 707.824.2362, but my office is in a different room without a telephone. If you need help, speak up during class, send me an email, or request to attend Tutorial in my classroom. If you call the class phone, please call before 8:30 or after school. I am in the Maker Lab, room TC1. I look forward to a great year!