

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 that allows for easy entry (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.
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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. The AP class is taught in Java. For more information talk with Mr. Hays.

Expectations:

- Arrive prepared
- 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).

Grading:

The class will rarely, if ever, have homework. The majority of your grade will be based on in-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%

Assignments: I will give you assignments regularly, providing ample class time to get things done, over several days before the assignments are graded. Most of what we do in class is open-source (that means

free software) which you could also install the software at home if you want to work on projects outside of class. If you make an effort to get things done while in class, you should be fine. If you are absent, you will need to make time to catch up by coming to Tutorial or making up missed work during class when you are finished with your other work.

I have a web site where I post assignments, as well as links to help with the material we are learning.

www.dogatemyhomework.com

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 the Internet during quizzes. You may not, however, communicate with live people or your classmates (for example by chat, email, your phone, etc.)
2. You must do your own work.
3. Please work quietly.

All students will sign an honor code document promising to do their own work and to promote a classroom of collaboration, honesty and responsibility. If you are caught cheating, you will receive a zero on that particular assignment/test/quiz as well as a referral to the administration.

Cell Phones:

Cell phones are awesome. They are also a tremendous distraction during class. Because of that all students will silence their phones and place them in numbered pockets at the front of the class at the start of each period and retrieve them as class ends each day.

Video Games:

Video games can be a lot of fun. This, however, is school, and I do not allow students to play or watch video games or YouTube content unrelated to school at any time, even when 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 programming project, learn a new programming skill, or sleep.

Help:

If you need help outside of class hours I am always in the lab during Tutorial, happy to help. I also post links to helpful sites, including documentation references, tutorials, videos and other helpful guides to our current programming language. Most of what we do in class is open-source (that means free software) which you could also install at home if you want to work on projects outside of class.

Contact Info:

The best way to contact me is by email: whays.ahs@wscuhd.k12.ca.us. My phone number is 707.824.2362. Please call before 7:30 or after school. I am in the Maker Lab, room TC1.

I'm looking forward to a great year!