

Welcome!

This course is an introduction to computer programming. We are going to sample a bunch of different programming systems including:

- **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.
- **Processing**: Processing, based on Java, and used with Arduinos, allows you to draw pictures and create animations using code.
- Projects of your own choice: a few times during the year you will be allowed to design a project of your own choosing, to pursue personal interests.

This is a beginning programming class, so students with no programming experience at all 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. That class is already full for this year. 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).

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 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.

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. Do your own work.
3. Work quietly.

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

Discipline/Consequences:

- Warning
- Modification of behavior (changed seating assignment, time-out, etc).
- Lunchtime, break, or after school detention.
- Call home to parents; conference with student, or student and parents.
- Loss of points leading to a lower grade in the course.
- Referral to administration.

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@wscuhsd.k12.ca.us. My phone number is 707.824.2362. Please call before 7:30 or after school. I am in room TC1 (the Maker Lab).

I'm looking forward to a great year!