How to succeed in CS 101

What is CS 101 really about?

It’s about using computation to solve problems—a.k.a. “Programming”

Computation is the closest thing we have to magic. Computing devices are everywhere and can do incredibly useful things.

ESP8266 WiFi-capable microcontroller

I want to excite you and scare you

Why you should be excited:

- Programming is awesome, fun, useful, and is an amazingly useful skill. It can be the basis for an extremely rewarding career.

Why you should be scared:

- Programming is challenging.
- Last year (in my sections) only 79% of students passed (with a 2 or higher.)
- Strategies that you have used successfully in other courses may very well *not* work in this course.

The good news

We (the CS 101 instructors) know *exactly* what you need to do in order to succeed in this course:

https://ycpcs.github.io/cs101-spring2018/success.html

Follow these recommendations and you will be very well positioned to do well in this course.

Ignore these recommendations and you will run a high risk of failing.

Read this document on your own! (I will present some of the highlights.)

Philosophy

- Have a growth mindset
- Expect to be confused
- Be methodical and persistent
- Be playful
- Be careful about how you ask for help
- Don’t expect this to be like your other courses
- Programming and computer science are for everyone

Practice

- Attend class
- Prepare for class
- Start the lab before class
- ***Practice!***
  - Try writing your own programs!
- Be responsible for your individual learning
- ***Start assignments early!***
- Put in the time
  - This course could require 2x, 3x, 4x or more time and effort compared to your other courses

What are you prepared to do to succeed?

There will be times when you are frustrated.

There will be times when you feel overwhelmed.

There will be times when you feel like giving up.

This is expected! Everyone goes through this when learning to program. What matters is how you react.