## Introduction to Python - CMPSC X420.P

**Meeting Time**: Tuesdays 6pm – 8:30pm, March 31 – June 2 (via Zoom)

Final 30 minutes are for you to work on homework / questions – I’ll be available during that time for any one on one help that you may need

**Zoom Link:** https://ucsb.zoom.us/j/935144485?pwd=TXlXWVRMNUxGSVc5Ny96UmN5OXRXdz09

Meeting ID: 935 144 485

Password: 050910

**Instructor**: Julie Nisbet - jmnisbet@gmail.com - 805 450 7635

**Office Hours**: By Appointment – email me and we can set up time

## Course Goals

This is a beginning programming course that will introduce students to the role programming can play in your life, regardless of whether or not you want to become a Software Engineer. Python is a great first language because it has a simple syntax, is easy to get setup and is fun and easy to write. Despite its simplicity, it’s also really powerful and is used by some of the biggest tech companies. Course goals include:

1. Learn how to think like a programmer
2. Learn how to learn and teach yourself
3. Demystify programming
4. Learn general programming concepts that can be applied to other languages
5. Learn to read / write Python

## Tentative Course Schedule (Subject to Change)

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| Week | Date | Class Topics |
| 1 | Mar 31 | Introductions, Environment Setup, Your First Python Program, Simple Data Types (Numbers, Strings) |
| 2 | Apr 7 | Using the Terminal, User Input, Variables & Functions |
| 3 | Apr 14 | Function Return Values, Intro to Lists |
| 4 | Apr 21 | For Loops, Making Decisions and Thinking Like a Programmer |
| 5 | Apr 28 | Working with Dictionaries |
| 6 | May 5 | Debugging Practice & Review (Topics TBD) |
| 7 | May 12 | Storing Functions in Modules, Reading files, Working with APIs, Working with third-party libraries |
| 8 | May 19 | Classes / Object Oriented Programming. |
| 9 | May 26 | Classes / Object Oriented Programming.  Review / Project Work |
| 10 | June 2 | Project Presentations |

## Grading

* Attendance / Participation - 40%
* Weekly Assignments – 30%
* Final Project – 30%

## Requirements

* Laptop (not a Chromebook)
* Repl.it account (for weekly assignments)

## Recommended Resources

* Python Crash Course - A Hands on Project Based Introduction to Programming by Eric Matthes (Not required)
* r/python and r/learnpython subreddits
* https://pyslackers.com/web