#### INTRODUCTION TO PYTHON - CMPSC X420.P

Mondays 6pm - 7:50pm, Jan 14 - Mar 19

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)

Week	Date	Class Topics
1	Jan 14 Jan 16	Introductions, Environment Setup, Your First Python Program, Simple Data Types (Numbers, Strings, Booleans), User Input
2	Jan 21 Jan 23	Using the Terminal, Variables & Functions
3	Jan 28 Jan 30	Function Return Values, Intro to Lists
4	Feb 4 Feb 6	For Loops, Making Decisions and Thinking Like a Programmer
5	Feb 11 Feb 13	Working with Dictionaries
6	Feb 18 Feb 20	Debugging Practice & Review (Topics TBD Based on Class Pace)
7	Feb 25 Feb 27	Storing Functions in Modules, Introduction to Object Oriented Programming
8	Mar 3 Mar 5	Classes / Object Oriented Programming Cont.
9	Mar 10 Mar 12	Reading files, working with APIs, working with third-party libraries
10	Mar 17 Mar 19	Project Work / Project Presentations

### GRADING

- Attendance / Participation 40%
- Weekly Assignments / Quizzes 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