## 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)

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| 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