Introduction to Programming Language

"Programming is the act of turning a 10 minute task into a 10 hour task."

-- Unknown, Common Adage

Class Sessions:

- Livestreaming: TBD
- Video Release: Friday, January 20, 2023
- Zoom Office Hours: 1:00PM – 5:00PM on Monday, January 23, 2023 – Friday, January 27, 2023

Instructor:

Kojin Glick, MANPTS Candidate

Email: kglick@middlebury.edu | Github: moonstripe | Mastodon: @moonstripe@infosec.exchange

Course Description:

This course provides a foundational knowledge of writing effective computer programs using Python. By the end of this course, students should be able to:

- ☑ understand and produce a Python project directory,
- ☑ parse and write a Python script,
- ☑ and go on to produce original Python programs while adhering to coding best practices.

Rather than attempt to reach significant technical depth, this course seeks to familiarize students with the process of learning a language's syntax, accessing a language's ecosystem, and maintaining the perspective of a "perpetual student". Students will also be exposed to the best practices of coding for the purpose of making the most of using computerized systems for their benefit.

For the sake of planting seeds for future projects, students will also be guided through special topics that touch on use-cases of course material so far. From basic networking to social media scraping to simple front-end design, this course seeks to be a pragmatic start to students looking to go from coding zero to programming hero as quickly as possible.

Methodology and Policies

This course is designed to be as asynchronous as possible. Videos will be livestreamed and posted on a video streaming website (platform TBD). Once the videos go live, office hours will be held for those who need specific questions answered. Unless students explicitly ask to not be recorded, these "office hours" will be recorded and livestreamed for the benefit of other students.

Course Materials and Resources

It is recommended that students use a Unix-based operating system, like Linux or MacOS. If using Windows, it should be noted that some of the commands may be different on your machine. The instructor will do their best to address any issues as they arrive.

Students are required to install a few important pieces of software, which are linked here:

- Python 3.9
- Visual Studio Code
    - Recommended extensions will be provided as they are mentioned.

In-class exercises, as well as take-home exercises, will be hosted in this Github repository.

Schedule

- TBD: Introduction to Programming Language
    - Repository
    - Video
- TBD: Introduction to Python
    - Repository
    - Video
- TBD: Special Topics
    - Repository
    - Video