Python for Programmers

Learning Python as your 2nd (3rd, 4th…) language

Most programming courses make no assumption about your prior knowledge, this course is different. It assumes you already are a programmer. Want to dive head first into Python, but don't want to sit through a basic course? This class is for you.

Rapidly learn Python specifics by mapping them to your existing knowledge. Understand the nuances of "being Pythonic" and the Pros/Cons of Python for your next project.

Length: 1 day lecture or 3 day workshop

Prerequisites: a solid grounding in at least one other procedural or object oriented programming language, preferably with 3 or more years experience. Workshop participants are required to have Python installed and be ready to use in their preferred development environment.

Topics

- Language fundamentals: variables, types, operators, loops, conditionals, exceptions

- Key differences and pitfalls

- Object Oriented Python

- Functional Programming in Python

- Introspection and meta-classes

- Concurrency and the impacts of the GIL

- "Batteries Included": an overview of the massive standard library

- Code and dependency management, multiple versions, and virtual environments

- Overview of popular projects: Django, Flask, Pandas, SQLAlchemy, Beautiful Soup, and Pillow

The lecture variant is a rapid-fire overview approach. The workshop covers the same topics but includes time to code in Python and dive more deeply.