Datasci 200

Berkeley SCHOOL OF INFORMATION

[Return to All Courses (https://learn.berkeley.edu/courses/395/pages/welcome-to-mids-alumni-course-library)]

Intro to Data Science Programming

This course is a fast-paced introduction to computer programming tailored to the needs of data science professionals. It uses Python as its main language and incorporates frequent coding exercises to build each student's capabilities. The course begins by introducing foundational Python objects, then explains how these are combined to form useful functions and classes. The first of two projects is an object-oriented exercise, giving students insight into how large-scale software systems are developed. The last section of the course is devoted to two popular Python packages for data analysis, NumPy and pandas. The final project consists of a data analysis, giving students the chance to explore a dataset of their own choosing. Aside from Python, the course also spends time on several other technologies that are fundamental to the modern practice of data science, including the command line, Jupyter notebooks, and source control with Git and GitHub.

Click here for a sample syllabus (https://learn.berkeley.edu/courses/395/files/16567?wrap=1) (https://learn.berkeley.edu/courses/395/files/16567/download?download_frd=1) .

Module	Videos
1 - Introduction to Programming, Command Line, and Source Code	(https://learn.berkeley.edu/courses/395/pages/datasci200-dot-1)
2 - Starting out with Python	(https://learn.berkeley.edu/courses/395/pages/datasci200-

Module	Videos
	dot-2)
3 - Sequence Types & Dictionary	 (https://learn.berkeley.edu/courses/395/pages/datasci200-dot-3)
4 - More about Control and Algorithms	 (https://learn.berkeley.edu/courses/395/pages/datasci200-dot-4)
5 - Functions	 (https://learn.berkeley.edu/courses/395/pages/datasci200-dot-5)
6 - Complexity	 (https://learn.berkeley.edu/courses/395/pages/datasci200-dot-6)
7 - Objects	 (https://learn.berkeley.edu/courses/395/pages/datasci200-dot-7)
8 - Object-Oriented Programming	 (https://learn.berkeley.edu/courses/395/pages/datasci200-dot-8)
9 - NumPy	 (https://learn.berkeley.edu/courses/395/pages/datasci200-dot-9)
10 - Data Analysis with Pandas	 (https://learn.berkeley.edu/courses/395/pages/datasci200-dot-10)
11 - Exploratory Data Analysis	 (https://learn.berkeley.edu/courses/395/pages/datasci200-dot-11)

Module	Videos
12 - Plotting and Visualization	 (https://learn.berkeley.edu/courses/395/pages/datasci200-dot-12)
13 - Panda Aggregation and Group Operations	 (https://learn.berkeley.edu/courses/395/pages/datasci200-dot-13)
14 - Working with Text and Binary Data/Testing	 (https://learn.berkeley.edu/courses/395/pages/datasci200-dot-14)