UCLA Department of Economics
Econ 10P: Introduction to Python for Economists

Syllabus

Instructor:	Dr. Randall R. Rojas
Office:	Bunche 8248
Telephone:	(310) 206-8380
E-mail:	rrojas@econ.ucla.edu
Webpage:	http://www.econ.ucla.edu/rrojas/

Time and Location
4:00PM - 6:00PM (PST), Mon -Thur. Remote via Zoom

Course Description
Introduction Python with a focus on data analysis through a hands on approach. The data and examples will mainly come from finance and economics.

Textbooks

1. Readings from Programming with Python. Kyla McMullen, Elizabeth Matthews, & June J. Parsons. 2023 Edition with MindTap Access Code. E-book with Cengage Learning
2. Python for Data Analysis. Wes McKinney. O'Reilly (2nd Ed.)
3. Introduction to Python for Econometrics, Statistics and Data Analysis. (2020, 4th Ed.) K. Sheppard (Link)

MindTap Tutorials: `https://www.cengage.com/services/product/mindtap/general/student`

MindTap Tech Support Phone/Web Site:
1-800-990-8211 (Direct Line)
`https://cengage.force.com/s/contact-us`

Computation of Course Grade

- 5% Attendance
- 15% Midterm Exam (July 28^{th})
- 25% Project/Presentation 1 (July $25-26$)
- 25% Project/Presentation 2 (August $2-3$)
- 35% Final Exam (Cumulative, August 4^{th})

Tentative Course Schedule

Day	Lecture Topics	Chapters
	Week I	
	Finance Topics: Time Value of Money & Modern Portfolio Theory	
1 (July 18)	Introduction, Data Types, Flow Control & Loops	3^a, 4^a, 5^a, 6^a, 7^a
2 (July 19)	Lists, Dictionaries & Functions	8^a, 9^a, 10^a
3 (July 20)	File Operations, Recursion, and Modules	11^a, 12^a, 13^a
4 (July 21)	Classes, Objects, and Methods	14^a, 15^a
	Week II	
	Finance Topics: Modern Portfolio Theory & CAPM	
5 (July 25)	Numerical Programming (`NumPy`)	4^b
6 (July 26)	Data Manipulation (`pandas`)	5^b, 6^b, 7^b
	Project 1 due on July 25/26	
7 (July 27)	Data Manipulation (`pandas`) -continued	5^b, 6^b, 7^b
8 (July 28)	Midterm Exam	
	Week III	
	Finance Topics: CAPM and Stock Price Modelling	
9 (Aug 1)	Plotting & Visualization	9^b
10 (Aug 2)	Data Analysis Application 1	Lecture Notes
	Project 2 due on August 2/3	
11 (Aug 3)	Data Analysis Application 2	Lecture Notes
12 (Aug 4)	Final Exam	

[a]Readings from Programming with Python (2023). Cengage. K. McMullen et. al.
[b]Python for Data Analysis. Wes McKinney. O'Reilly (2nd Ed.)