Syllabus

Instructor:	Dr. Randall R. Rojas
Office:	Bunche 8248
Office Hour:	Thursday, 12:30-1:30PM via Zoom
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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. Python for Data Analysis. Wes McKinney. O'Reilly (2nd Ed.) (Link)
- 2. Introduction to Python for Econometrics, Statistics and Data Analysis. (2020, 4th Ed.) K. Sheppard (Link)

Computation of Course Grade

- 5% Attendance
- 15% Midterm Exam (July 24th)
- 25% Project/Presentation 1 (July 26 27)
- 25% Project/Presentation 2 (August 2-3)
- 30% Final Exam (Cumulative, August 4th)

Disabled Students and the Center for Accessible Education (CAE)

Any student with a preexisting illness or condition who requests special arrangements must (a) qualify under CAE rules for such special arrangements and (b) must take the exam with CAE. Any such arrangements with CAE must be made the first week of classes. The instructor must be informed of any such arrangement in the first week of classes. For additional information and the qualification conditions of the Center for Accessible Education, please visit their website at http://www.cae.ucla.edu/. All other students must take the exam at the scheduled time under the same time constraints. It is the responsibility of all students who request special arrangements with CAE to be familiar with all of their rules as well as the rules of this class.

Tentative Course Schedule

Day	Lecture Topics	Chapters
Week I		
Finance Topics: Time Value of Money & Modern Portfolio Theory		
1 (July 17)	Introduction, Data Types, Flow Control & Loops	2^a , Lecture nontes
2 (July 18)	Lists, Dictionaries & Functions	3^a
3 (July 19)	File Operations, Recursion, and Modules	6^a
4 (July 20)	Classes, Objects, and Methods	$14^a, 15^a$
Week II		
Finance Topics: Modern Portfolio Theory & CAPM		
5 (July 24)	Midterm Exam	
6 (July 25)	Numerical Programming (NumPy)	4^a
7 (July 26)	Data Manipulation (pandas)	$5^a, 6^a, 7^a$
	Project 1 due on July 26/27	
8 (July 27)	Data Manipulation (pandas) -continued	$5^a, 6^a, 7^a$
Week III		
Finance Topics: CAPM and Stock Price Modeling		
9 (Jul 31)	Plotting & Visualization	9^a
10 (Aug 1)	Data Analysis Application 1	Lecture Notes
	Project 2 due on August $1/2$	
11 (Aug 2)	Data Analysis Application 2	Lecture Notes
11 (Aug 3)	PLF Review Session	
12 (Aug 4)	Final Exam (Friday, Aug 4)	

 $^a\mathrm{Python}$ for Data Analysis. Wes McKinney. O'Reilly (2nd Ed.)