

Updated schedule

As promised, the course schedule changes throughout the semester. The following reflects the latest updates:

Meeting			Financial topics	Technical topics	Deliverable (typically due 11pm night prior)
	M 1/15	No class (MLK Holiday)			
1	W 1/17	Course introduction	Market returns and risk Implied and realized volatility	Calculations in Excel	HW0 (due Thursday 1/18)
2	M 1/22	Python demo; Introduction to data	Relative performance and hedging Performance attribution (selection/treatment)	Python demo (Copilot)	
3	W 1/24	Questions and analysis; First financial data analysis	Class survey Return skewness and binary returns CRSP	Bloomberg ABCD Forecasting	Peer review HW1
4	M 1/29	Python intro	Binomial trees and binomial distribution	Python and notebook ecosystem	Peer review
				Python arithmetic	

5	W 1/31	Python intro (cont.)	Following and explaining financial news	booleans functions	HW2
6	M 2/5	<i>No in-person meeting</i> Python intro (cont.)	—	Python variables and types (videos)	Peer review
7	W 2/7	Python intro (cont.)	Following and explaining financial news Order speed vs. price Monte Carlo simulation	Initialize/loop/filter Random numbers	HW3
8	M 2/12	Financial modeling with data	Record highs as binary trees (some sections) Duration and the Gordon Growth model (some sections) Midterm fixed income project	Non-uniform random variables	Peer review
9	W 2/14	Monte Carlo simulation	Brownian motion simulation	Monte Carlo simulation practice	HW4
	M 2/19	<i>No class (Presidents Day Holiday)</i>			
10	Tu 2/20	<i>Tuesday class</i> Pandas intro	Prices and returns	Introduction to Pandas	Peer review

Midterm group

11	W 2/21	<i>Attendance required</i> Ethics module 1	Professional ethics	—	project Ethics discussion prep.
12	M 2/26	Pandas intro (cont.)	Increasing-coupon bonds (midterm project)	Series and DataFrame, index	
13	W 2/28	Pandas intro (cont.)	Dividends and closing price adjustments Questions ↔ Algorithms ↔ Code	CSV imports, method chaining	HW5 Peer review
14	M 3/4	Pandas intro (cont.)	Random variation and sampling error Autocorrelation and return momentum	Series methods, Visualizing distributions	Peer review Data/methods demo
15	W 3/6	Applied Pandas analysis	Demand curves and price elasticity Margins/markups and competitive environment Commodities prices (FRED)	CSV imports, exploratory data analysis	HW6
M 3/11		<i>No class (Spring Break)</i>			Peer review
W 3/13		<i>No class (Spring Break)</i>			
		Applied Pandas	Mortgage data (FRED)	FRED API	

16	M 3/18	analysis (cont.)	Term structures	EDA and visualization	
17	W 3/20	Data/methods demonstration presentations	<i>Various</i>	<i>Various</i>	Data/methods demo HW6
18	M 3/25	Data/methods demonstration presentations (cont.)	<i>Various</i>	<i>Various</i>	Peer review
19	W 3/27	<i>Attendance required</i> Ethics module 2	Professional ethics	—	Ethics report
20	M 4/1	Data visualization and CAPM	The Capital Asset Pricing Model (CAPM) Ticker re-use	Data cleaning and EDA Visualizing relationships	HW7
21	W 4/3	Introduction to linear regression	Total risk, systematic risk, idiosyncratic risk	Seaborn and Pandas EDA Covariance, correlation, and regression slopes	Peer review
22	M 4/8	Introduction to linear regression (cont.)	CAPM alpha and beta House price prediction	OLS in statsmodels Interpreting regression outputs Visualizing non-linear/heterogeneous	HW7 (optional)

effects

23	W 4/10				Peer review (optional/make-up)
	M 4/15	No class (Patriots Day Holiday)			
24	W 4/17	Group presentations	Various	—	Final group project
25	F 4/19	Friday class Group presentations	Various	—	
26	M 4/22	Final wrapup			
	W 4/24	Final examination			Final exam

This project is maintained by [lukestein-classes](#)

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