

Schedule

This course schedule **will** change during the semester. Ad hoc topic changes (unannounced) may be based on current events or class pace and interest. Announcement of any meeting changes will be distributed via Discord; please ensure that you are monitoring the #announcements channel there.

Midterm and final examinations are tentatively scheduled for Friday 4/4 1–3pm, and Wednesday 5/7, 9am–12pm, respectively, in Olin Hall room 120.

	M/W	Tu/Th	Potential topics	Deliverable
	M 1/20		No class (MLK Holiday)	—
1	W 1/22	Tu 1/21	<i>Course introduction</i> Market returns and risk Implied and realized volatility Calculations in Excel	HW0 (due Thursday 1/23)
2	M 1/27	Th 1/23	<i>Python demo; Introduction to data</i> Relative performance and hedging Performance attribution Python demo (Copilot)	
3	W 1/29	Tu 1/28	<i>Financial questions and financial analysis</i> Class survey Return skewness and binary returns CRSP Bloomberg Intro. to Forecasting	HW1
4	M 2/3	Th 1/30	<i>Python introduction</i> Binomial trees and binomial distribution Python and the notebook ecosystem	
5	W 2/5	Tu 2/4	Following and explaining financial news Python arithmetic booleans functions	HW2
6	M 2/10	Th 2/6	Python variables and types	
7	W 2/12	Tu 2/11	Order speed and execution quality Monte Carlo simulation Initialize/loop/filter Random numbers	HW3

	M/W	Tu/Th	Potential topics	Deliverable
	M 2/17		No class (Presidents Day Holiday)	—
8	Tu 2/18	Th 2/13	<i>Financial modeling with data</i> Record highs as binary trees Duration and the Gordon Growth model Non-uniform random variables	
		Tu 2/18	Monday classes meet on Tuesday (Babson Monday)	—
9	W 2/19	Th 2/20	<i>Monte Carlo simulation</i> Brownian motion	HW4
10	M 2/24	Tu 2/25	<i>Pandas introduction</i> Prices and returns	
11	W 2/26	Th 2/27	<i>Midterm project presentations</i> Series and DataFrame, index	Midterm group project (due Tuesday 2/25)
12	M 3/3	Tu 3/4	Dividends and closing price adjustments Questions ↔ Algorithms ↔ Code CSV imports, method chaining	HW5
13	W 3/5	Th 3/6	Attendance required: Professional ethics	Ethics discussion prep.
14	M 3/10	Tu 3/11	Random variation and sampling error Autocorrelation and return momentum Series methods, Visualizing distributions	
15	W 3/12	Th 3/13	Demand curves and price elasticity Margins/markups and the competitive environment Commodities prices (FRED) CSV imports, exploratory data analysis	HW6
	M 3/17	Tu 3/18	No class (Spring Break)	—
	W 3/19	Th 3/20	No class (Spring Break)	—
16	M 3/24	Tu 3/25	Mortgage data (FRED) Term structures FRED API EDA and visualization	

	M/W	Tu/Th	Potential topics	Deliverable
17	W 3/26	Th 3/27	<i>Data/methods demonstration presentations</i>	Data/methods demo (due Tuesday 3/25)
18	M 3/31	Tu 4/1	<i>Data/methods demonstration presentations</i>	
19	W 4/2	Th 4/3	Attendance required: Professional ethics	Ethics report (due Tuesday 4/1)
	F 4/4	F 4/4	Midterm examination	Midterm exam (1–3p in Olin 120; subject to change)
20	M 4/7	Tu 4/8	The Capital Asset Pricing Model (CAPM) Data cleaning and EDA Visualizing relationships	
21	W 4/9	Th 4/10	<i>Introduction to regression</i> Total risk, systematic risk, idiosyncratic risk Seaborn and Pandas EDA Covariance, correlation, and regression slopes	HW7
22	M 4/14	Tu 4/15	House price prediction OLS in statsmodels Interpreting regression outputs Visualizing non-linear/heterogeneous effects	
23	W 4/16	Th 4/17	TBA	
	M 4/21		No class (Patriots Day Holiday)	—
24	W 4/23	Tu 4/22	<i>Group presentations</i>	Final group project (due Monday 4/21)
25	F 4/25	Th 4/24	<i>Group presentations</i>	
26	M 4/28	Tu 4/29	Final wrapup	
	W 5/7	W 5/7	Final examination	Final exam (9a–12p in Olin 120; subject to change)