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.

We may also have **special sessions**, including where multiple sections may meet simultaneously (typically to accommodate a guest). These will of course be announced in advance, but please aim to maintain availability on class days during all course section times (8:30am–11:15am/12:30pm–3:15pm).

	Meeting	Topics/Modules	Deliverable (typically due 11pm night prior)
	M 1/15	*No class (MLK Holiday)*	—
1	W 1/17	Course introduction	HW0 (due Thursday 1/18)
2	M 1/22	S1	
3	W 1/24	P1	Peer review HW1
4	M 1/29	cont.	Peer review
5	W 1/31	cont.	HW2
6	M 2/5	A1	Peer review
7	W 2/7	P2	HW3
8	M 2/12	A2	Peer review
9	W 2/14	P3, D1	HW4
	M 2/19	*No class (Presidents Day Holiday)*	—
10	**Tu 2/20**	*Tuesday class* S2, P4	Peer review
11	W 2/21	A4 *Attendance required*	Midterm group project
12	M 2/26	A3, D2, S3	
13	W 2/28	P5	Peer review HW5
14	M 3/4	S4, D3	Peer review Data/methods demo
15	W 3/6	S5	
	M 3/11	*No class (Spring Break)*	—
	W 3/13	*No class (Spring Break)*	—
16	M 3/18	S6, A5	

17	W 3/20	A6	HW6
18	M 3/25	P6	Peer review
19	W 3/27	A4 *Attendance required*	Ethics report
20	M 4/1	A7	HW7
21	W 4/3	cont.	Peer review
22	M 4/8	D4	HW8
23	W 4/10	A8, A9	Peer review
	M 4/15	*No class (Patriots Day Holiday)*	—
24	W 4/17	Group presentations	Final group project
25	**F 4/19**	*Friday class* Group presentations	
26	M 4/22	Final wrapup	
	W 4/24	*Final examination*	Final exam

Modules

Python

Module	Topic	Resources
P1	Introduction to Python	TP 1–3, 8, 10–12 WTP 1–7 CfE Getting Started 1, Coding 3, Getting Started 2.1–2.8 PESDA 2, 4, 10 PDA 2.3, 3.1
P2	Control flow and data structures	TP 5–7 WTP 8–14 CfE Getting Started 2.9–2.16 PESDA 12 PDA 3.2
P3	Data manipulation	PDSH 3 PESDA 8–9, 16 CfE Data 1, Data 2 PDA 5, 7–8, 10-12
P4	Visualization	PDSH 4.14 Seaborn Tutorial API overview and Plotting functions
P5	Regression and statistics	PESDA 21
P6	Numerical Python	PDSH 2 PDA 4

PESDA 3, 11, 19

Statistics and Inference

Module	Topic	Resources
S1	Introduction to data	IMS 1–3
S2	Exploratory data analysis (EDA)	IMS 4–6
S3	Regression modeling	IMS 7–10
S4	Foundations of inference	IMS 11–15
S5	Statistical inference	IMS 16–23
S6	Inferential modeling	IMS 24–27

Financial Data

Module	Topic	Resources
D1	pandas-datareader	datareader documentation
D2	Bloomberg	TBA
D3	WRDS	WRDS Data documentation, Classroom, Research WRDS Python Data Access Library
D4	Alternative data	TBA

Microsoft Excel

Excel will be used throughout the course, with coverage not divided into explicit modules.

Financial Applications

Module	Topic	Resources
A1	Monte Carlo simulation	TBA
A2	Fixed income	TBA
A3	Equity returns	TBA
A4	Professional ethics	TBA
A5	Foreign exchange	TBA
A6	Factor models	TBA
A7	Capital budgeting	TBA
A8	Derivatives	TBA
A9	Equity portfolios	TBA