Schedule

Date (Mon)	Lecture (Mon)	Lecture (Wed)	Lab (Fri)	Advanced Section (Wed)	Assignment (R:Released Wed - D:Due Wed)	
30-Aug	No Lecture	Lecture 1: Introduction to CS109A	Lab 1: Data - formats| sources| & scraping			
6-Sep	No Lecture (Labor Day)	Lecture 2: Introduction to PANDAS and EDA	Lab 2: Pandas & EDA 2		R:HW1 - D:HW0	
13-Sep	Lecture 3: Introduction to Regression kNN and Linear Regression	Lecture 4: Multi-linear and Polynomial Regression	Lab 3: kNN & Linear Regression		R:HW2 - D:HW1	
20-Sep	Lecture 5: Model Selection and Cross Validation	Lecture 6: Regularization Ridge and Lasso Regression	Lab 4: Multiple Regression & Polynomial Regression			
27-Sep	Lecture 7: Probability	Lecture 8: Inference in Regression and Hypothesis Testing	Lab 5: Estimation of Regulariztion Coeffs /w CV	Advanced Section 1: Linear Algebra Primer	R:HW3 - D:HW2	
4-Oct	Lecture 9: Missing Data & Imputation	Lecture 10: Principal Component Analysis	Lab 6: PCA	Advanced Section 2: Hypothesis Testing		
11-Oct	No Lecture (Indigenous Peoples' Day)	Lecture 11: Case Study	Midterm	Advanced Section 3: Math Foundations of PCA	D: HW3	
18-Oct	Lecture 12: Visualization	Lecture 13: Ethics	Lab 7: Visualization		R:HW4	
25-Oct	Lecture 14: Logistic Regression 1	Lecture 15: Logistic Regression 2	Lab 8: Classification	Advanced Section 4: GLM	R:HW5 - D:HW4	
1-Nov	Lecture 16: Decision Tree	Lecture 17: Bagging	Lab 9: Decision Trees			
8-Nov	Lecture 18: Random Forest	Lecture 19: Boosting	Lab 10: Random Forest	Advanced Section 5: Stacking & Mixture of Experts	R:HW6 - D:HW5	
15-Nov	Lecture 20: Model Interpretability	Lecture 21: Experimental Design	Lab 11: Model Interpretability & Ethics	Advanced Section 6: Bandits (tentative)		
22-Nov	Lecture 22: NLP 1	No Lecture	No Lab		R:HW7 - D:HW6	
29-Nov	Lecture 23: NLP 2	Lecture 24: Final Review			D:HW7	
6-Dec			Project Submission Deadline	Reading Period		
13-Dec				Finals Week		
20-Dec	Projects: Final Showcase					