

Introduction to Data Science – Fall 2025

DATE	WEEK	DAY	Lecture Topic	Homework	Steps for success – Final Project Info – Writing
09/03/25	1	Wednesday	What is Data Science Install computer packages - GIT - Python or R - Basics of computation	Get your computer set up	CLASS PREP – You should be taking notes when you watch the class videos and following along in the provided python notebook.
09/05/25	1	Friday	Lab		
09/08/25	2	Monday	Hello World! Applications	HW1 – Due Friday 11:59pm	Make sure to try the exercises as you prepare for class.
09/10/25	2	Wednesday	Data and visualization		
09/12/25	2	Friday	Lab		
09/15/25	3	Monday	Visualizing Numerical Data Visualizing Categorical Data	HW2 – Due Friday 11:59pm	
09/17/25	3	Wednesday	Data Wrangling		It's okay if this is hard a first, come get help!
09/19/25	3	Friday	Lab		
09/22/25	4	Monday	Data Wrangling – Continued	HW3 – Due Friday 11:59pm	Start thinking about Final Project Ideas. Look at some of the available data sets on our class webpage.
09/24/25	4	Wednesday	Data Wrangling - Joins and Merges		Seriously, it's okay if this is hard, but I really want you to come get some help!
09/26/25	4	Friday	Lab		
09/29/25	5	Monday	Reading in Data and Data Types	HW4 – Due Friday 11:59pm	Exam 1 handed out.
10/01/25	5	Wednesday	Work on Exam 1 – Data Basics – in Groups.	Submit individual “draft” work on Exam1 before class! Exam 1 and Self Assessment due – Sunday 10/13/24	Get some initial data for your final project. Start the data preparation process.
10/03/25	5	Friday	Lab		
10/06/25	6	Monday	Importing, Recoding, and Visualizing Data	HW5 – Due Friday 11:59pm	How did the exam go? It's not too late to get some help.
10/08/25	6	Wednesday	Effective Visualization and Data Storytelling		
10/10/25	6	Friday	Lab		
10/13/25	7	Monday	STUDY DAY		
10/15/25	7	Wednesday	Getting Data and Simpsons Paradox		

10/17/25	7	Friday	Lab		
10/20/25	8	Monday	Doing Data Science and Web Scraping	HW6 – Due Friday 11:59pm	
10/22/25	8	Wednesday	Data Ethics – Misrepresentation and Data Privacy		Complete some exploratory data analysis on your Final Project data.
10/24/25	8	Friday	Lab		
10/27/25	9	Monday	Data Ethics – Algorithmic Bias	HW7 – Due Friday 11:59pm	Exam 2 handed out.
10/29/25	9	Wednesday	Work on Exam 2 – Data Visualizations – in Groups	Submit individual “draft” work on Exam2 before class! Exam 2 and Self Assessment due – Wednesday 11/6/24	Don’t forget to sign up for Spring Classes: DATA/GIS 167 – Introduction to Programming in Python DATA 100 – Math for Data Science
10/31/25	9	Friday	Lab		
11/03/25	10	Monday	Fitting and interpreting Models Modeling nonlinear relationships	Final Project Proposals – due before class. HW8 – Due Friday 11:59pm	Final Project Proposals should include a description of your questions, a data set, and some initial Exploratory Data Analysis (EDA).
11/05/25	10	Wednesday	Introduction to Modeling and Algorithms		
11/07/25	10	Friday	Lab		
11/10/25	11	Monday	Modeling Nonlinear Relationships	HW9 – Due Friday 11:59pm	
11/12/25	11	Wednesday	Modeling with Multiple Predictory		
11/14/25	11	Friday	Lab		
11/17/25	12	Monday	Classification and Categorical Data	HW10 – Due Friday 11:59pm	Final Project Groups Assigned – start discussing you project outlines, structure, and version control plans with your group.
11/19/25	12	Wednesday	Principle Component Analysis		
11/21/25	12	Friday	Lab		
11/24/25	13	Monday	K-means Clustering	HW11 – Due Friday after TG break at 11:59pm	
11/26/25	13	Wednesday	THANKSGIVING		
11/28/25	13	Friday			

12/01/25	14	Monday	Review: The Data Science Lifecycle – Publishing your Results		
12/03/25	14	Wednesday	Time to Work on Final Projects	Work with your group on finishing your final project. Make sure you have addressed each part of the data science life cycle, address ethical issues, and have clear reproducibility in your results. Respond to and review peer work in written form. Practice communicating clearly between data science group members.	
12/05/25	14	Friday	Lab		
12/08/25	15	Monday	Time to Work on Final Projects		
12/10/25	15	Wednesday	FINAL EXAM TIME 12:00 Noon – 2:30pm	Each group will present their results.	Complete a full cycle data science report that uses referencing to make the results reproducible and more formal writing to describe the process, ethics, results, and conclusions.