



Tentative Course Outline:

A more detailed weekly schedule will be developed as the class progresses.

Note: The course syllabus provides a general plan for the course; deviations may be necessary. In general, you can expect to cover chapters 1-8 of the required text. However, if time allows, we will introduce more advanced topics towards the end of the semester that will be helpful in your final projects and your career as a data scientist.

Date	Topics	Readings	Notes
Aug 24-28	Introduction to Fundamentals of Data Science+ Python Tutorial	Ch. 1, 2	Read class policies
Aug 31-Sep 4	Machine Learning for Predictive Data Analytics		
Sep 7-11	Data to Insights to Decisions	Ch. 3	
Sep 14-18	Data Exploration		
Sep 21-25	Data Pre-processing		
Sep 28-Oct 2	Data Presentation	Ch. 4	
Oct 5-9	Information-based Learning		
Oct 5-9	Midterm (Chapters 1-4)	Ch. 5	Form Project Groups
Oct 12-16	Similarity-based Learning	Ch. 6	
Oct 19-23	Probability-based Learning	Ch. 8	
Oct 26-30	Model Evaluation	Ch 7	

Nov 2-6	Error-based Learning	
Nov 9-13	Practice-Supervised Learning	
Nov 16-20	Practice-Imbalanced Datasets	
Nov 23-28	Thanksgiving Break	Work on projects
Nov 30-Dec 4	Projects	Final report, source code
TBD (Dec 8-15)	Final Exam	