

is597\_mlc\_course\_roadmap\_spring\_2024.xlsx

WK	Topics	Readings	In-Class Activities	Assignments	Final Project (FP)
1	Course Startup	Syllabus Roadmap		Introduce Yourself Computing Setup: Your own computer	
2	What Is Machine Learning	Géron Chap. 1	Q&A: Syllabus, Course Lecture: What is Machine Learning Discussion: Potential Final Project Ideas	Computing Setup: AWS Academy Learner Lab (Login Account)	
3	Intro to Cloud Computing	See links in Weekly Schedule	Lecture: Intro to Cloud Computing Demo: AWS Acad. Learner Lab	AWS Academy Learner Lab (User Guide & Service Access)	
4	Python for ML Crash Course - Part 1	McKinney Chaps. 2, 4	Group Coding Exercise	Jupyter Notebook Numpy	Research FP Candidates
5	Python for ML Crash Course - Part 2	McKinney Chaps. 5, 6, 7, 9	Review Solutions Group Coding Exercise	Matplotlib	Research FP Candidates
6	Data Preprocessing Using Cloud Computing	Raschka & Mirjalili Chap. 4	Review Solutions Group Coding Exercise	Data Preprocessing	Research FP Candidates
7	Building Pipelines For Machine Learning	Géron Chap. 2	Review Solutions Group Coding Exercise	Building ML Pipelines	Research FP Candidates
8	Feature Engineering		Review Solutions Group Coding Exercise		
9	Spring Break				
10	Training Models on Cloud Platforms	Géron Chaps. 3, 4	Review Solutions Group Coding Exercise	Model Training	FP Proposal Due
11	Dimensionality Reduction Model Fine-Tuning	Géron Chap. 8 Raschka & Mirjalili Chaps. 5, 6, 7	Review Solutions Group Coding Exercise	Dimensionality Reduction & Model Fine-Tuning	Work On FP
12	Testing and Evaluation Using Cloud Computing	Raschka & Mirjalili Chap. 10	Review Solutions Group Coding Exercise	Testing and Evaluation	Work On FP
13	Unsupervised Learning	Raschka & Mirjalili Chap. 11	Review Solutions Group Coding Exercise		FP Progress Report Due
14	Intro to Deep Learning	Géron Chap. 10			Work On FP
15	Work on Final Project				Work On FP
16	Work on Final Project				FP Deliverables Due
17	Exam Period				