

Week	Date	Tuesday Lecture	Thursday Lecture	Code Examples	Paper Reading	HW
1	08/19 - 08/23	Course Overview	Data Sci. Introduction, Python Programming	<ul style="list-style-type: none"> Intro. To Python Setting up Google Colab 	-	-
2	08/26- 08/30 (Add/Drop)	EHR, NumPy	ML Metrics	<ul style="list-style-type: none"> NumPy Intro Toxicity Prediction Solubility Prediction 	Watson Oncology	
3	09/02 - 09/06	Pandas, Preprocessing	Version Control	<ul style="list-style-type: none"> Pandas Intro Preprocessing (5) Setting up Git 		HW1
4	09/09 - 09/13	RF, kNN	Biophysical Modeling	<ul style="list-style-type: none"> kNN RF Biophysical Modeling 	Septic Shock Prediction	
5	09/16 - 09/20	Evaluation	SVM	<ul style="list-style-type: none"> Evaluation 		HW2
6	09/23 - 09/27	Neural Network	Neural Network, Deep Learning	<ul style="list-style-type: none"> FC Networks 	Melanoma Detection	
7	09/30 - 10/04	Review	Exam 1			
8	10/07 - 10/11	ConvNet	Convnet (cont.)	<ul style="list-style-type: none"> CNN 	Adversarial Attacks	
9	10/14 – 10/18	CNN Architectures	Microscopy	<ul style="list-style-type: none"> Cell Counting Cell Segmentation 		HW3
10	10/21 – 10/25	RNN	RNN	<ul style="list-style-type: none"> Physiological Signals (MIMIC) 	Drug Discovery	
11	10/28 – 11/01	Intro to NLP	NLP Representations	<ul style="list-style-type: none"> Clinical Notes 		HW4
12	11/04 – 11/08	Generative Models	Genomics	<ul style="list-style-type: none"> Generating Drug Molecules TF Binding RNA Interference Chromatic Accessibility 		
13	11/11 – 11/15	Feature Selection	Guest Lecture			HW5
14	11/18 – 11/22	Review	Exam 2			
15	11/25 – 11/29	Ethical AI	Holiday			
16	12/02 – 12/06		Reading Day			