

Week	Date	Lecture Number	Topic	Homework
Week 1	Wednesday, January 22	1	Introduction	
Week 1	Friday, January 24		Discussion: Python Review	
Week 2	Monday, January 27	2	Linear Regression	
Week 2	Wednesday, January 29	3	Perceptron, start Logistic Regression	
Week 2	Friday, January 31		Discussion: Probability Review	
Week 3	Monday, February 3	4	Maximum Likelihood and logistic regression revisited	HW1 Out (due Feb 10)
Week 3	Wednesday, February 5	5	Maximim A Posteriori, regularized least squares	
Week 3	Friday, February 7		Discussion: Regression and Linear Algebra	
Week 4	Monday, February 10	6	Gradient Descent, convexity and smoothness	HW2 Out (due Feb 17)
Week 4	Wednesday, February 12	7	Bias/Variance (overfitting and generalization. May cover VC dimension or metric entropy)	
Week 4	Friday, February 14		Discussion: Machine Learning Overview	
Week 5	Monday, February 17		Presidents' Day Holiday, Classes Suspended	HW3 Out (due Feb 24)
Week 5	Tuesday, February 18	8	Regularization, Cross-validation	Substitute a Monday schedule of
Week 5	Wednesday, February 19	9	SVM (feature map and kernel trick)	
Week 5	Friday, February 21		Discussion: Midterm Review	
Week 6	Monday, February 24	10	SVM (soft and hard margin, support vectors)	HW4 Out (due Mar 5)
Week 6	Wednesday, February 26		Midterm 1	
Week 6	Friday, February 28		Discussion: Linear Classification	
Week 7	Monday, March 3	11	Decision Tree	
Week 7	Wednesday, March 5	12	Boosting	HW5 Out (due Mar 12)
Week 7	Friday, March 7		Discussion: Decision Tree	
Spring Recess	March 8 – March 16			
Week 8	Monday, March 17	13	kNN	
Week 8	Wednesday, March 19	14	Clustering	HW6 Out (due Mar 26)
Week 8	Friday, March 21		Discussion: Clustering	
Week 9	Monday, March 24	15	PCA	
Week 9	Wednesday, March 26	16	Reinforcement Learning 1	HW7 Out (due Apr 11)
Week 9	Friday, March 28		Discussion: PCA/RL	
Week 10	Monday, March 31	17	Reinforcement Learning 2	
Week 10	Wednesday, April 2	18	Neural Network Intro 1	
Week 10	Friday, April 4		Discussion: Midterm Prep	
Week 11	Monday, April 7	19	Neural Network Intro 2	

Week 11	Wednesday, April 9		Midterm 2	HW8 Out (due Apr 16)
Week 11	Friday, April 11		Discussion: NN	
Week 12	Monday, April 14	20	Deep Learning 1	
Week 12	Wednesday, April 16	21	Deep Learning 2	HW9 Out (due Apr 23)
Week 12	Friday, April 18		Discussion: Pytorch	
Week 13	Monday, April 21		Patriot's Day: no class	
Week 13	Wednesday, April 23	22	Conv Nets and Computer Vision	HW10 Out (due May 4)
Week 13	Friday, April 25		Discussion: Conv nets/deep learning	
Week 12	Monday, April 28	23	Sequence Models, Attention and Language Modeling	
Week 12	Wednesday, April 30		Final Review	
	TBD		Final Exam	