Course contents:

The following assignments will be covered:

- A1: "Linear Regression"
- A2: "Logistic Regression"
- A3: "Multi-class Classification and Neural Networks"
- A4: "Neural Network Learning"
- A5: "Regularized Linear Regression and Bias/Variance"
- A6: "Support Vector Machines"
- A7: "K-Means Clustering and PCA"
- A8: "Anomaly Detection and Recommender Systems"

Session 1:

Activity	**Time**	**Remark**
Introduction	42m	Self-study
Linear Regression with One Variable	1h10m	Self-study
Linear Algebra Review	1h	Self-study
Linear Regression with Multiple Variables	1h4m	Self-study
Octave/Matlab Tutorial	1h19m	
Work on assignment A1	Rest	

Session 2:

Activity	**Time**
Presentation of solution to assignment A1	20m
Logistic Regression	1h11m
Regularization	39m
Work on assignment A2	Rest

Session 3:

Activity	**Time**
Presentation of solution to assignment A2	20m
Neural Networks: Representation	1h2m
Neural Networks: Learning	1h17m
Work on assignments A3 and A4	Rest

Session 4:

Activity	**Time**
Presentation of solution to assignment A3 and A4	40m
Advice for Applying Machine Learning	1h3m
Machine Learning System Design	59m
Work on assignment A5	Rest

Session 5:

Activity	**Time**
Presentation of solution to assignment A5	20m
Support Vector Machines	1h37m
Unsupervised Learning	39m
Dimensionality Reduction	1h7m
Work on assignments A6 and A7	Rest

Session 6:

Activity	**Time**
Presentation of solutions to assignments A6 and A7	40m
Anormaly Detection	1h30m
Recommender Systems	58m
Work on assignment A8	Rest

Session7:

Activity	**Time**	**Remark**
Presentation of solution to assignment A8	20m	
Guest lecture TBD	Approx 45m	
Large Scale Machine Learning	1h3m	
Application Example: Photo OCR	56m	Self-study