

Meeting	Date	Topics and Sections Covered	Reading
1	9/3	Introduction and review of hypothesis testing and sampling distributions	Chapter 1
2	9/5	Introduction to simple linear regression	Chapter 2
3	9/8	LS; estimation of standard deviation; inferences on β_1 ; correlation	3.1-3.7
4	9/10	Coefficient of determination; estimation and prediction	3.8-3.10, 3.12
5	9/12		
6	9/15	Multiple regression introduction; estimation of model variance	4.1-4.6
7	9/17	Inferences about β s; coefficient of determination; F-test for model; interaction model w/quantitative predictors	4.7-4.9
8	9/19	Second-order models; estimation and prediction in MR; complex MR models	4.10-4.12
9	9/22	Complex MR models; F-test for nested models	4.13-4.15
10	9/24		
11	9/26	Introduction to model building; models of different orders	5.1-5.5
12	9/29	Coding variables; models with different numbers of quantitative variables	5.6-5.10
13	10/1	External model validation	5.11-5.12
14	10/3	Model building	Chapter 6
15	10/6	Review	
16	10/8	Exam 1	
17	10/10		
18	10/13	Fall break	
19	10/15	Assumption violations; estimability; multicollinearity	7.1-7.5
20	10/17	Extrapolation; data transformations	7.6-7.7
21	10/20	Residual analysis	Chapter 8
22	10/22		
23	10/24	Piecewise linear regression; inverse prediction	9.1-9.3
24	10/27	Weighted least squares; modeling qualitative responses	9.4-9.5
25	10/29	Logistic regression	9.6
26	10/31	Ridge regression	9.7
27	11/3	Robust and nonparametric regression models	9.8-9.9
28	11/5		
29	11/7	Introduction to time series	10.1-10.2
30	11/10	Time series using smoothing operators	10.3
31	11/12	Forecasting with regression	10.4
32	11/14	Autocorrelation and autoregressive error models	10.5-10.6
33	11/17	Constructing time series models	10.7-10.8
34	11/19	Forecasting with autoregressive models; seasonal models	10.9-10.10
35	11/21	Review	
36	11/24	Exam 2	
37	12/1	Forecasting using lagged values	10.11
38	12/3		
39	12/5	Case studies	Chapters 13 and 14