

Meeting	Date	Topics and Sections Covered	Reading	Pages
1	2/4	What is statistics and can you lie with it?	Introduction	1-5
2	2/6	Charts, histograms, stem-and-leaf plots	1.1	6-16
3	2/9	Measuring variability, averages, percentiles, boxplots	1.2	30-44
4	2/10	Linear transformations	1.2	45-47
5	2/11	Density curves, Standardizing, normal distribution	1.3	53-62
6	2/13	Calculating normal probabilities, checking normality	1.3	62-71
7	2/16	Bivariate relationships, +/- association, linearity, correlation	2.0-2.2	83-94, 101-105
8	2/17	Regression as a conditional mean, least-squares criterion, simple linear regression	2.3	108-121
9	2/18	Proving the LS line is the "best fit" line		
10	2/20	Models and residuals, residual plots, R-squared	2.3, 2.4	117-119, 125-132
11	2/23	Two-way tables, conditional distributions, related back to regression, predicting Y from X vs. predicting X from Y	2.5	142-151
12	2/24	Extrapolation, ecological correlations, lurking variables	2.3, 2.4	111-112, 132-136
13	2/25	Regression to the mean, transformations		Supplemental
14	2/27	Association versus causation, Simpson's paradox	2.5, 2.6	148-151, 154-159
15	3/2	Review		
	3/3	Exam 1		
16	3/4	Experimental design, randomization, blocking	3.1	178-191
17	3/6	Population vs. sample, sampling designs	3.2	197-207
18	3/9	Ethics	3.4	224-232
19	3/10	Sampling distributions, bias and variability	3.3	212-221
20	3/11	Probability: addition and multiplication rules, distributions, independence	4.0-4.2	237-254
21	3/13	Random variables, expected values and variances, linear combinations	4.3-4.5	258-267, 270-286, 289-303
22	3/16	Binomial setting, sampling distribution of a proportion	5.0-5.1	311-331
23	3/17	Sampling distribution of a sampling mean, central limit theorem, Weibull distributions	5.2	335-346
24	3/18	Review		
	3/18	Exam		
25	3/30	Confidence intervals (known σ), margin of error	6.0-6.1	353-363
26	3/31			
27	4/1	Behavior of CIs, choosing sample sizes, t-distribution	6.1, 7.1	394-369, 418-420
28	4/3	Confidence intervals (unknown σ), confidence intervals for a proportion	7.1, 8.1	420-422, 488-493
29	4/6	Hypothesis testing and p-values, one-sample z-test, HP vs. CI	6.2	372-390
30	4/7	One-sample t-test	7.1	422-428
31	4/8	Hypothesis testing caveats, Type I and II errors, power	6.3, 6.4	394-399, 401-410
32	4/10	Power calculations		Supplemental
33	4/13	Test of a single population proportion	8.1	493-501
34	4/14	Comparing two population means	7.2	447-467
35	4/15	Comparing matched pairs, comparing two variances, t-test robustness	7.1, 7.3	428-435, 474-477
36	4/17	Comparing two population proportions, introduction to ANOVA	8.2, 12.0	505-515, 637
37	4/20	One-way ANOVA	12.1	638-655
38	4/21	Multiple comparisons	12.2	655-664
39	4/22	Introduction to multiple regression, ANOVA as a regression model	10.2	579-583
40	4/24	Review		
	4/27	Exam 3		
41	4/28	Review of simple linear regression	Chapter 2	
42	4/29	Inference for simple linear regression	10.1	559-576
43	5/1	Residuals, R-squared vs. adjusted R-squared in multiple regression	11.0-11.2	607-627
44	5/4	Coefficient interpretation		Supplemental
45	5/5	Modifying variables, collinearity, model building strategies		Supplemental
46	5/6	Checking assumptions, fit vs. interpretability		Supplemental
47	5/8	Review		