

Wk	Date	Ch.	Topic	Practice Problems	Notes
1	11-Jan	HO1	Salutations, R intro, Vibe Check. Intro, Random Variables and Distributions	SP 1-6	Spring term begins 9 Jan. Tuesday, 9 Jan is Monday schedule "handout" = (HO)
2	16-Jan & 18-Jan	HO2 HO3	Exploratory Data Analysis flex Confidence Intervals	SP 7-8 SP 9-13	No class; ML King Jr. Day
3	23-Jan & 25-Jan	HO4 HO5 0	Hypothesis Testing Analysis of Variance (ANOVA) Test What is a Statistical Model?	SP 14-17 Ch5: 5,15,21,54b,73a Ch0: 1,9,13	
4	30-Jan & 1-Feb	1.1 1.2 1.3	The Simple Linear Regression Model Conditions for a Simple Linear Model Assessing Conditions	Ch1: 1,3,5 Ch1: 9,11,19,21 Ch1: 2,23*	* (c) Make a normal QQ plot
5	6-Feb & 8-Feb	1.4 1.5	Transformations Outliers and Influential Points Review	Ch1: 27acde,29,30 Ch1: 33,45,46; Ch4: 10	
6	13-Feb & 15-Feb		6-WEEKS EXAM PART1 (HO, Ch 0, Ch 1) 6-WEEKS EXAM PART2 (HO, Ch 0, Ch 1)		<i>Academic Reserve Week</i>
7	20-Feb & 22-Feb	2.1 2.2	Inference for Regression Slope Partitioning Variability - ANOVA	Ch2: 11,15,16 Ch2: 4,27,28	No class; Washington's Brithday
8	27-Feb & 29-Feb	2.3 2.4 3.1	Regression and Correlation Intervals for Prediction Multiple Regression	Ch2: 8,21,36 Ch2: 44,48,49,37,38,54 Ch3: 1,9,20a	
9	5-Mar & 7-Mar	3.2 3.2 3.3	Assessing a Multiple Regression Model Assessing a Multiple Regression Model Comparing Two Regression Lines	Ch3: 7,11ab,17*,21,22	* Also Find 95% PI for student in (c)
SPRING BREAK: 11-16 MARCH					
10	19-Mar & 21-Mar	3.3 4.5 3.4	Comparing Two Regression Lines (cont.) Coding Categorical Predictors New Predictors from Old	Ch3: 29d,32* Ch4: 13,15; Ch5: 54b**,73a** Ch3: 13,38	* (c) "Interaction" is "Year:StateControl" term. ** In linear regression framework
11	26-Mar & 28-Mar	3.5 3.6	Correlated Predictors Testing Subsets of Predictors	Ch3: 16,53*,54 Ch3: 47	* Also find VIFs for model in (c)
12	2-Apr & 4-Apr		<i>Review</i> 12-WEEKS EXAM (Ch 2, Ch 3, Sec. 4.5) 12-WEEKS EXAM (Ch 2, Ch 3, Sec. 4.5)		<i>Academic Reserve Week</i>
13	9-Apr & 11-Apr	9.1 9.2	Choosing a Logistic Regression Model Logistic Regression and Odds Ratios	Ch9: 1,3,5,9,17,21 Ch9: 7,8,21,23	
14	16-Apr & 18-Apr	9.3 9.4	Assessing the Logistic Regression Model Formal Inference: Tests and Intervals	Ch9: 19acd Ch9: 27,28,29	
15	23-Apr & 25-Apr	10.1,2 10.3,4	Multiple Logistic Regression Formal Inference	Ch10: 33,34 Ch9: 41,33; Ch10: 28,32a	
16	30-Apr		<i>Review</i> <i>Review and course closeout</i>		

Course Learning Objectives:

- Choose, fit, assess, and use appropriate statistical regression models.
- Employ statistical software to solve data-based problems.
- Present statistical analysis in both a technical and non-technical format.
- Understand and explain the limitations of statistical analysis.
- Understand the difference between statistical significance and practical significance.

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