

Week Topic

1. Scientific vs. non-scientific enquiry. Paradigms, theory, explanation, research. Conceptualizing: concepts & variables. Ch 1, 2, and pp 171-172.
2. Research questions. Operationalizing research. Measurement. Four kinds of numbers. Categorical vs. continuous. Levels of scaling. Ch 3. Validity and reliability. Ch 4, and pp 175-180.
3. Sampling: non-probability and probability sampling. Ch 5. Univariate descriptive statistics. Central tendency: mode, median, mean. Dispersion: range, IQR. Variance, standard deviation. Z-score. Ch 6, and pp 173-175.
4. Distributions, the normal distribution, areas under the normal curve. Ch 7. The normal curve and sampling distributions, standard errors. Ch 8.
5. Inferential statistics, standard error of the mean Ch 9. Confidence intervals, Z-test of a single mean. Ch 10.
6. Thursday October 12: Mid-term exam #1
Bivariate descriptive statistics: cross-tabulation. Ch 11.
7. Covariance, correlation. Ch 13. Regression. Ch 14.
8. Inferential statistics: statistical significance. Testing the null hypothesis. Ch 15. Chi-squared. Ch 16.
9. Tests for correlations. Significance of Pearson's r, difference between two r's. Ch 18, pp 145-148. Review for mid-term exam.
10. Tuesday November 7 or Thursday November 9: Mid-term exam #2
11. Z-test for difference between means Ch 17
12. t-test for difference between means, ANOVA. Ch 19. Experiments, Ch 20.
13. Survey research, Ch 21.

Grading:

1. Mid-Term exam #1:	week 6	12%
2. Mid-Term exam #2:	week 10	20%
3. Final exam:	final exam period	30%
4. Assignments		18%
5. Ten in-class quizzes	random	10%
6. Tutorial attendance and participation		10%

Probable grading system		
50% - 59.999%	D	
60% - 63.999%	C-	
64% - 67.999%	C	
68% - 71.999%	C+	
72% - 75.999%	B-	
76% - 79.999%	B	
80% - 83.999%	B+	
84% - 87.999%	A-	
88% - 91.999%	A	
92% or higher	A+	