

Psychology 311
Spring, 2012
Schedule of Activities

Date	Topic(s)	Reading/Homework
Week 1		
M (01/09)	Administrative Issues Website location Meeting Times Grading Policy Quick Review-Skim of RDASA3, Chapters 1–7	Download and install R (if you have not already done so). Purchase the textbook. Enroll as a student on the online website. This will give you access to support materials. Download <i>GPower 3</i> and install.
W (01/11)	Descriptive Statistics	Read RDASA3, Chapters 1–2
F (01/13)	Descriptive Statistics (ctd)	Start Homework Assignment 1. Due 01/23
Week 2		
W (01/18)	Basics of Probability Theory	Read RDASA , Chapter 3
F (01/20)	Basics of Probability Theory(ctd)	
Week 3		
M (01/23)	Introduction to Hypothesis Testing	Read RDASA, Chapter 4
W (01/25)	Introduction to Hypothesis Testing (ctd) Sampling Distributions and Statistical Estimation	Read RDASA, Chapter 5
F (01/27)	Sampling Distributions and Statistical Estimation (ctd) Power Calculation via Standardized Effect Size	Start Homework Assignment 2 Due 02/06
Week 4		
M (01/30)	Review and Catch-up	
W (02/01)	The t -Distribution and its Applications	Read RDASA, Chapter 6
F (02/03)	The t -Distribution and its Applications(ctd) The Chi-Square and F Distributions	
Week 5		
M (02/06)	Noncentrality Interval Estimation and Confidence Intervals for Effect Size	Read Steiger & Fouladi (1997). Read RDASA, Chapter 7
W (02/08)	Noncentrality Interval Estimation (Ctd.) Conceptual Foundation of ANOVA Between-Subjects Designs: One Factor	Read RDASA, Chapter 8
F (02/10)	No Class	Start Homework Assignment 3 Due 02/20

Week 6		
M 02/13	Between-Subjects Designs: One Factor (ctd). ANOVA in R Measures of Effect Size in 1-Way ANOVA	
W 02/15	No Class (Instructor illness)	
F 02/17	Robustness issues Unequal Variances	
Week 7		
M 02/20	The Welch <i>t</i> -test The Welch <i>F</i> -test	
W 02/22	No Class (Instructor Illness)	
F 02/24	Robustness Issues Non-Normality and its effects	
Week 8		
M 02/27	Multi-Factor Between-Subjects Designs 2-Way Fixed Effects ANOVA	RDASA, Chapter 9 Start Homework 4
W 02/29	Trimmed Means Winsorizing Yuen's Test Interaction Plots Interaction Effects Main Effects Simple Main Effects	
F 03/02	Optional Class – Troubleshooting HW 4	
Week 9	SPRING BREAK	
M 03/12	Midterm Exam Review	
W 03/14	Midterm Exam	
F 03/16	2-Way Factorial Designs The 2-Way Linear Model	
Week 10		
M 03/19	Exam Retrospective	
W 03/21	2-Way Factorial Design – Fixed Effects SS Calculation simplified Expected Mean Squares The E(MS) Test Construction Principle Effect Size Estimation	
F 03/23	(Non-Orthogonal) ANOVA with unequal <i>n</i> Type I, Type II, Type III Sums of Squares R ANOVA Calculations Revisited	Start Homework 5 (Due 04/02)

Week 11		
M 03/26		
W 03/28	Multiple Hypothesis Testing	RDASA3, Chapter 10
F 03/30	The Maximum Possible Contrast	
Week 12		
M 04/02	Multiple Hypothesis Testing	
04/04	A Catalog of Multiple Comparison Techniques Trend Analysis in Between-Subjects Designs	
04/06	Trend Analysis Balanced Analysis using Orthogonal Polynomials Unequal Spacing Deriving trend analysis weights using regression	RDASA3, Chapter 11 Start Homework 6 Due 04/13
Week 13		
04/09	Random Effects Models and Mixed Models The theoretical distinction Expected Mean Squares Power Calculation Effect Size Estimation	Maxwell and Delaney, Chapter 10, pages 469–493
W 04/11	Advanced Designs: A Preliminary Comparison	RDASA3, Chapter 12 RDASA3, Chapter 13
F 04/13	1-Way Repeated Measures ANOVA	RDASA3, Chapter 14
Week 14		
M 04/16	Between-Within Designs	RDASA3, Chapter 15 Start Homework 7 Due 04/23
W 04/18	Between-Within Designs	
F 04/20	Analysis of Covariance	RDASA3, Chapter 25
Week 15		
M 04/23	Open	
F 04/26	Exam Review	