Data Analysis II
Psy 612
CRN 25306
Winter 2012
1000-1120 TR
Condon 260

Instructor:
Robert Mauro
Office Hours: MTuTh 1130-1230 & by appt.
311 Straub
mauro@uoregon.edu
346-4917

Teaching Assistants:
Brian Clark
Office Hours: W 1200-1300
302 Straub Hall
clark13@uoregon.edu
F 1300-1400 & by appt.
(541) 346-45534

Allison Tackman
Office Hours: TuW 1300-1400 & by appt.
349 Straub Hall
tackman@uoregon.edu
(541) 346-8037

Laboratory
180 Straub CRN: 25307, 25308 F 10-1120; 1130-1250

Course Information
This is the second course in a three-course graduate level data analysis sequence. This course is devoted to topics in multiple regression with special emphasis on complex analysis of variance and experimental design. We assume that all students have successfully completed Psy 611 (Data Analysis I) or equivalent. In general, the text chapters listed in the syllabus cover the material planned for class on the day that they are assigned. This material provides more depth and often alternate explanations of some of the issues.

Inclement Weather Policy
If Eugene School District 4J cancels (not delays) school, we will cancel class. Nothing we do in this class can’t wait until it is safe to travel.
Texts:

Class notes available on Blackboard

Other Useful Books:

Analysis of Variance & Experimental Design


Multiple Regression & Related Issues


Conducting Empirical Research


Class Requirements:
Complete take-home midterm (35% of grade), final (50% of grade), and weekly homework assignments (15%) of grade (see guidelines). Homework will be assigned and due each Thursday. Homework should be e-mailed to xxx at xxx by 1000 on the Thursday that it is due. The laboratory section may have additional assignments.
Syllabus

Introduction to the General Linear Model
1/10  Linear Regression  CCWA 1, 2
1/12  Regression Diagnostics  CCWA 4
1/17  Basic Multiple Regression  CCWA 3
1/19  Partitioning variance  CCWA 5
1/24  Nonlinear relations  CCWA 6
1/26  Regression with categorical variables  CCWA 8
1/31  Analysis of interactions  CCWA 7, 9
2/2  Analysis of covariance

Complex Analysis of Variance
2/7  Representation of Experimental Designs  K&W Section III  Midterm Out
2/9  Factorial Analysis of Variance  K&W 24
2/14  Random Factor Models & Quasi-F's  K&W 25
2/16  Nested Designs  K&W 25
2/21  Repeated Measures and Randomized Blocks  K&W Section V
2/23

Advanced Topics
2/28  Multicollinearity  CCWA 10
3/1  Missing Data and Nonorthogonal Designs  CCWA 11
3/6  Heteroscedasticity
3/8  Autocorrelation  CCWA 15
3/13  Categorical Dependent variables  CCWA 13  Final Out
3/15  Repeated Measures ANCOVA
3/22  FINAL DUE 10:00 AM by e-mail