PSYC08 - Advanced Data Analysis in Psychology

Summer 2016

Instructor: Dr. Douglas A. Bors

Office Hours: Wednesdays 10:00 to 12:30 and by6 appointment**.**

TUT0001	WE	9:00	10:00	MW223	TBA
TUT0002	WE	10:00	11:00	MW223	TBA
TUT0003	WE	11:00	12:00	IC200	TBA
TUT0004	WE	13:00	14:00	IC208	TBA

****There are NO Tutorials during the first week of the course!**

Room: SW128

Textbook: Statistical Methods for Psychology by David Howell

Grading: Your final grade in the course will be based on quizzes and assignments (20%), a mid-term examination (40%), and a final examination (40%). There will be at least six quizzes or assignments during the term. Your best four performances will used for the quiz/assignment portion of you grade. The quizzes will be administered in tutorial without warning, so be prepared! The date for the mid-term will be posted and announced early in the term. The date for the final examination will be published by the registrar's office sometime during the term.

Make-Ups: Make-up quizzes are not given. Make-up mid-terms are never given without a legitimate reason. The student is required to present a medical certificate, if a test is missed due to illness. The certificate must state that, in the physician's opinion, you are unable to write the test. Do not phone or e-mail your instructor or TA concerning missed exams. Certificates are to be given to the invigilator at the time for the make. Make-up mid-terms will be given at 5:00 pm on the Tuesday of the week following the original date of the exam. On the date of the make-up, the location of the exam will be posted on this page and on the office door of Dr. Bors. If the make-up is also missed for legitimate reasons, a grade will be assigned on the basis of the student's relative performance on the final examination and quizzes. Make-ups for final examinations are entirely at the discretion of the registrar's office.

Overview: This course is designed to provide the student with the advanced principles of data analysis for both parametric and non-parametric analyses. In terms of parametric statistics, our treatment will focus on Analysis of Variance (ANOVA). In addition to the material covered in PSYB07, a working knowledge of elementary algebra is assumed.

Tentative Course Outline:

Week	Topic	Chapters
1	Review of Descriptive Statistics and Graphs	1 through 7
2	Review of PSYB07 tests and an Introduction to ANOVA (testing homogeneity of variance)	11
3	One-Way between-subject designs	11
4	Power & Magnitude of Experimental Effect	8 & 11
5	Introduction to Multiple Comparisons	12
6	Introduction to Repeated Measures Designs	14
7	Multiple comparisons continued	14
8	Factorial Designs (between-subjects only)	13
9	Factorial Designs (Mixed designs)	13
10	Inroduction to Multiple Regression	15
11	Non-Parametric Approaches	18
12	Integration	All Covered