

PSYC08

Data Analysis in Psychology

Winter 2004

The Mid-Term Make-Up Examination will be held

in room S208

Instructor: Dr. Douglas A. Bors

Office Hours: Tuesday and Thursday 9:30 to 12:00

Textbook: Statistical Methods for Psychology (5th Edition) by David Howell

Office Hours: Tuesdays from 9:30 to 11:00 & Thursdays from 10:00 to 12:00.

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.

Grading: Your final grade in the course will be based on quizzes (10%), a mid-term examination (40%), and a final examination (50%). There will be at least five quizzes during the term. Your best four performances will be used for the quiz portion of your grade. The quizzes will be administered in class 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 tests 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, not just that you were examined for a complaint. Do not phone or e-mail your instructor or TA concerning missed exams. Certificates are to be given to the invigilator at the time fo the make. Make-up mid-terms will be given at 5:00 pm on the Monday 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 the office door (S-638) 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. Make-ups for final examinations are entirely at the discretion of the registrar's office.

Dates for Exams will be posted at the top of this page, once they have been scheduled

Tentative Course Outline

Week	Topic	Chapters
1	Review of Descriptive Statistics and Graphs	1 through 7
2	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

Some Overheads for Classroom Lectures

Here are the instructions for downloading and printing the overheads.

Step #1: Click on the link from the list that corresponds to the overhead you wish to view.

Step #2: A window opens asking what you wish to do with the file. Choose "open" and then click OK.

Step #3 Under the file tab, choose the PRINT option. Note that in the window that pops up there is a "PRINT WHAT?" field. If you choose not to print them as slides (the default), you might print them as "handouts", which will put several on a single page and still leave you space for writing notes.

F-max Table

Formula Sheets

Basic Concepts Reviewed

Basic Theorems

Structural Approach

Anova Assumption

Anova Example

Homogeneity of Variance

Review Question I

Randomized Block Designs

Review Questions IIa

test

Repeated measures

Repeated Measures cond.

Review Questions II

Multiple Comparisons

Post-Hoc tests

Power Once again

Review IV

Review V

Factorial Design (two between-subject IVs)

Fixed versus Random IVs

Factorial Design: Repeated Measures

Review VI

Nonparametric Statistics