PSYB07

Data Analysis in Psychology

The mid-etem exam is scheduled for

Saturday the 18th of October

from 7:00 to 9:00 pm in the ARC.

This week's Friday review (1:00) with be a regular class covering new material.

Fall 2003

Instructor: Dr. Douglas A. Bors

Office Hours: Tuesday 2:15 - 4:30 pm; Thrusday 3:15 - 4:30 pm

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

T.A.s:

This course is designed to provide the student with the basic

principles of data analysis for both descriptive and inferential statistics. In terms of descriptive statistics, our treatment will include measures of central tendency, measures of variability, regression, correlations, and graphic presentations. Regarding inferential statistics, our introduction will include Chi Square, t-tests, and Analysis of Variance (one-way designs). 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 five (perhaps six) quizzes during the term. Your best four performances will used for the quiz portion of you 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	Basic Concepts & Descriptive Statistics	1 & 2
2	Descriptive Statistics & Graphics	2
3	Distributions & Hypothesis Testing	3 & 4
4	Probability	5
5	Chi_Square	6
6	Linear regression & Correlations Coefficients	9
7	Correlations cond.	9
8	t-tests	7
9	t-test continued; Power	7 & 8
10	ANOVA :Independent samples: One-Way ANOVA	11
11	Testing slopes and correlations	9
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 sinle page and still leave you space for writing notes.

Formula Sheet

Summation : the rules of summation notation

Daycare : an example of contradictions in analyses

BasicConcepts : the basic concepts of the field

Scales : a numbers is not a numbers

Central Tendency : different types of averages

Composite Means

Measures of Spread

Properties of Estimators----- optional derivation of sample variance (n-1) as unbiased

Degrees of Freedom

Graphs & Distributions

Standardized Scores

Normal Distribution

REVIEW Question set #1

Hypothesis testing: first look

Probability

Review Question Set #2

Binomial Distribution

Review Question Set #3

Chi Square

Regression

Optional link on Simultaneous Equations

Correlations

ANOVA assumptions

Approaches to ANOVA

In class example overheads

Test of Significance for Regression and Correlation

Final Review Questions