PSYB07

Data Analysis in Psychology

Fall 2013

Course Outline

Instructor: Dr. Douglas A. Bors

Office: SW408

Office Hours: Wednesdays 10:30 to 11:30 and Wednesdays 5:15 to 6:15. As the semester progresses there will additional office hours and review sessions scheduled.

Textbook: *Statistics for Psychology* (6th ed.) by Aron, Coups and Aron. The textbook is accompanied by an access code to MyStatLab. Please refer to the announcement on Blackboard on how to initiate MyStatLab.

Teaching Assistants:

TUT0001	TU	09:00	10:00	BV 355	Cho Kin (Tim) Cheng
TUT0002	TU	09:00	10:00	BV 260	Jiaqing (Jess) Chen
TUT0003	TU	10:00	11:00	BV 355	Ada Le
TUT0004	TU	10:00	11:00	BV 260	Sijing Wu
TUT0005	TU	10:00	11:00	BV 363	Ron Chu
TUT0006	TU	09:00	10:00	BV 363	Ron Chu
TUT0007	TU	11:00	12:00	BV 260	Sijing Wu
TUT0008	TU	09:00	10:00	BV 361	Alex Daros

This course is designed to provide the student with the basic principles of data analysis. In terms of descriptive statistics, our treatment will include measures of central tendency, measures of variability, regression, correlation, and graphic presentations. Regarding inferential statistics, among others, the course will include probability theory, Chi-Square, and t-tests,

Grading:

Your final grade in the course will be based on take-home assignments (5%), online tests (10%) and study plan/mastery points (15%) in MyStatLab, a mid-term examination (30%), and a comprehensive final examination (40%).

There will be at least three take-home assignments. We use only your best two grades from these three.

There will be two components in MyStatLab: online tests and study plan/mastery points. There will be an online test for each chapter, 11 in total. The test of a particular chapter will be made available on the day I begins that chapter, and it will be due a week after I finish that chapter (before lecture, Wednesday at 2pm).

The study plan/mastery point component will be self-paced. You have to obtain 16 mastery points before the mid-term and another 16 before the final exam to get the full credit. There will be 65 mastery points available for the course in total. You can choose to do any of them.

The date for the mid-term will be posted once the schedule has been made early in the term.

The date for the final examination will be published by the registrar's office later in the term.

Make Ups:

Late assignments will not be accepted. Remember, we use only your best two performances.

Late MyStatLab online tests and study plan/mastery points will not be given credit.

If the midterm is missed, do NOT phone or email the instructor or your TA. Make-up mid-term will be given on the Tuesday at 5:00 pm the week following the original date of the mid-term. The location of the make-up will be posted a few days prior to the make-up. Remember, make-up mid-terms are allowed under special circumstances, such as illness or a death in the family. If you are unsure about qualifying for the make-up, attend the make-up exam and your reasons for missing the mid-term will be evaluated later. Do NOT call or email to ask about qualifying for the make-up.

Make-ups for the final examination are controlled by UTSC policy and the registrar's office.

Week	**Topics**	**Chapter**
1 (9/4)	Introduction, basic concepts,	1
	Variables, randomness	
2 (9/11)	Graphs, descriptive statistics,	1 & 2
	Measures of central tendency	
3 (9/18)	Descriptive statistics (cont.)	2, **Online Test 1 due**
	Measures of spread	
4 (9/25)	Normal distribution	3, **Online Test 2 due**
	Linear transformations and z-scores	
5 (10/2)	Probability, Bayes' theorem	3 & 4
	Hypothesis testing (intro)	
6 (10/9)	Hypothesis testing, Type I and II errors	5 & 6, **Online Test 3 & 4 due**
	Power and effect size	
7 (10/23)	Review and integration	1 - 6, **Online Test 5 & 6 due**
TBA	**Mid-term**	**16 Mastery Points due**
8 (10/30)	t-test (intro)	7
	Power revisited	
9 (11/6)	t-test (cont.)	8, **Online Test 7 due**
	The variance sum law	
10 (11/13)	Correlation & regression	11 & 12, **Online Test 8 due**
	Covariance & scatter plots	
11 (11/20)	The binomial distribution	13, **Online Test 11 & 12 due**
	Chi-Square	
12 (11/27)	Review and integration	1 – 13, **Online Test 13 due**
TBA	**Final Examination**	**16 Mastery Points due**