PSYC08

Advanced Data Analysis in Psychology

Instructor: Dr. Douglas A. Bors

Office Hours: Tuesday 2:15 –3:30; Thursday 3:15 –4:30

T.A.s: Marty Niewiadomski, Evan Morgan, & Genevieve Quintin

This course is designed to provide the student with the principles of data analysis for both experimental and non-exeperimental research designs. The course will include forms of analysis of variance (ANOVA) that are appropriate to various reserach designs, non-parametric forms of analysis, and an itnroduction to multiple regression. 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 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 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.

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

Tentative Course Outline

Week	Topic	Chapters
1	ANOVA: basic logic	11
2	ANOVA: between-subject one-way design (fixed vs. random models)	11
3	ANOVA: testing assumptions and transformations	11
4	ANOVA: magnitude of effect and power	11
5	ANOVA: introduction to repeated measure (randomized block) designs	14
6	ANOVA: a priori and post-hoc test	12
7	ANOVA: tests for trends	12
8	ANOVA: introduction to factorial designs (interactions)	13
9	ANOVA: mixed designs (one between- and on within-subject factor)	14
10	Nonparametric Approaches to analysis	18
11	An Introdcution to Multiple Regression	15
12	Integration	All Covered

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Required texts: <u>Attitudes and Opinions</u> (2nd Edition) by Stuart Oskamp

<u>The Psychology of Attitude Change and Social Influence</u> by Philip Zimbardo and Michael Leippe

Marking Scheme: There will be two exams, the first counting for 40% and the second for 60% of the total grade. The exams will contain multiple choice questions as well as short answer questions. They will <u>not</u> be cumulative and in each instance will cover material from the textbook and from lectures. Note that the final exam will be scheduled during the final examination period.

Click lecture date to go to informal lecture outline. These are superseded by PowerPoint slides when introduced.

Date	Reading	Topic
<u>January 9</u>	Oskamp Chpt. 3	Measurement of Attitudes.
<u>January 16</u>	Oskamp Chpt. 5	Public Opinion Polling.
	Zimbardo Chpt. 1	A World of Influence.
<u>January 23</u>	Oskamp Chpt. 7	Formation of Attitudes and Opinions
<u>January 30</u>	Zimbardo Chpt. 2	Influencing Behaviour: Direct Approaches.
<u>February 6</u>	Oskamp Chpt. 8	Communication of Attitudes and Opinions.
	Zimbardo p. 127-148	Changing Attitudes Through Persuasion.
February 13	Midterm Exam	Results will be posted here.
February 20	Reading Week	
<u>February 27</u>	Oskamp Chpt. 9	Attitude Change Theories and Research.
	Zimbardo Chpt. 5	Making Persuasion Last.
<u>March 6</u>	Oskamp Chpt. 4	Structure and Functions of Attitudes.
<u>March 13</u>	Zimbardo Chpt. 7	Influence, Awareness, and the Unconscious.
	Zimbardo Chpt. 8	Influence and the Legal System.
<u>March 20</u>	Oskamp Chpt. 11	Attitude-Behavior Consistency.
	Zimbardo Chpt. 3	Influencing Attitudes Through Behavior.
<u>March 27</u>	Zimbardo Chpt. 6	Resisting and Embracing Influence.
	Zimbardo Chpt. 9	Social influence for Health and Happiness.
<u>April 3</u>	Oskamp Chpt. 15	Racism and Prejudice.