

Course Syllabus

PSYC08 – Summer 2009 Advanced Data Analysis in Psychology

Lectures location: Room SY 110 (new Science building)

Lectures times: Wednesdays 1 - 4 pm

Course Instructor: Dwayne E. Paré.

Contact: dpare@psychexperiments.com

Office location: S-563

Weekly office hours: Wednesdays 4-5 pm

Teaching Assistants: Dominique Vuvan; Stephanie Bass; Gelareh Jowkar-Baniani.

Office hours and exam reviews: Check the BlackBoard for postings.

Office location: TBA

Tutorials times and locations: Tutorials will begin on May 20th, 2009 @12:00PM

Tutorials will be in room MW 140

(SPSS labs, exam reviews and mini-tutorials will be announced in class)

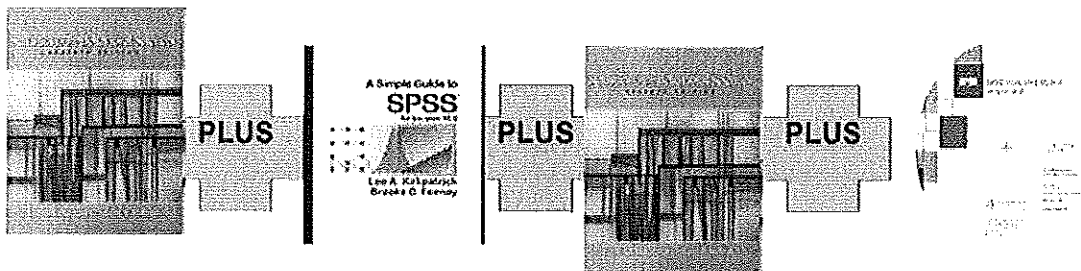
Course Description. This course is a continuation of PSY B07. The primary focus of this course is on the understanding of the Analysis-of-Variance and its application to various research designs. Examples will include homogeneity of variance, normality assessments, a-priori and post hoc tests, effect size, and power. Finally, there will be an introduction to regression and multiple regression, including discussions of design issues and interpretation problems. Students will learn the use of computers in statistical analysis and SPSS.

Course Evaluation: Grading: Your final grade in the course will be based on one assignment (2 parts) worth 20% (13% for part A and 7% for part B), a mid-term examination worth 40%, and a final examination, non-cumulative, worth 40%. The date for the mid-term examination will be posted and announced early in the term (check BlackBoard announcements in case you miss any classes). The date for the final examination will be published by the registrar's office on ROSI sometime during the term. The exams will be 3 hours long and will assess your theoretical understanding of the material as well as your ability to solve problems and read SPSS output.

Required texts and materials

1. Gravetter, F. & Wallnau, L. (1991). *Statistics for the Behavioral Sciences, 7th edition.* Wadsworth Thompson Learning, New York. And Study guide.
2. Gravetter, F. & Wallnau, L. (1991). *Study guide to accompany "Statistics for the Behavioral Sciences, 7th edition.* Wadsworth Thompson Learning, New York.
3. *A simple Guide to SPSS for version 16.0.* Kirkpatrick, Lee A. and Feeney, Brooke C. (2009)
4. *SPSS Student Version 16.0*

The ISBN number for all materials required for this course is: 0495777374



PSYC08 – Summer 2009 (D. Paré)
Outline of the topics to be covered in the course:

Week - date	Topics
1 – May 6th 2009	Introduction (TAs & Instructor, and resources available to students)
2 – May 13th 2009	TAs Review of Basic Stats (No tutorials)
3 – May 20th 2009	Introduction to ANOVA & post hoc SPSS analysis
4 – May 27th 2009	One Factor ANOVA & post hoc cont. Two Factor ANOVA & post hoc Main Effects and Interactions ASSIGNMENT 1 Made Available
5 – June 3rd 2009	Two Factor ANOVA & post hoc cont. One Factor ANOVA (Repeated Measures) & post hoc
6 – June 10th 2009	Two-way Mixed ANOVA (Between-Within) Main Effects and Interaction Assumptions; Effect Size; Power ASSIGNMENT 1a Due
7 – June 17th 2009	Two-way Mixed ANOVA (Between-Within) cont. Midterm Exam Review
<u>MIDTERM:</u>	All lectures & lecture materials covered up to date. Please check the BlackBoard for the location, date, seat number, and time of the mid-term exam.
8 – June 24 th 2009	Correlation
9 – July 1st 2009	<u>No Classes!</u> Reading Week (Tues June 30th – Fri July 3rd)/Canada Day
10 – July 8th 2009	Correlation cont.
11 – July 15th 2009	Introduction to Regression .
12 – July 22nd 2009	Regression cont. and Multiple Regression

ASSIGNMENT 1b Due

13 – July 29th 2009 **Multiple Regression cont.**
Chi-Square Test (tentative)
Exam review

FINAL EXAM

All lectures & lecture material covered from the Midterm exam to the end of the course. Please note the final is NOT cumulative.