## PSYCHOLOGY 300 (Section 001) – Spring 2006 Psychology Statistics

Course Instructor:	Dr. Mike Hurley
Office Hours:	Mon/Wed 10:30 – 11:00 a.m.
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Email:	mhurley2@gmu.edu
Text:	Gravetter, F.J., & Wallnau, L.B. (2004). Statistics for the behavioral
	sciences (6 <sup>th</sup> Edition). Belmont, CA: Wadsworth/Thompson.

Psychology 300 is an introduction to statistics as it applies to psychological research. The emphasis in the lecture will be on understanding and applying statistical tests to psychological data, as well as on mathematical derivations. By completion of the course, you should be able to select appropriate statistics, apply them, and make correct statistical decisions to answer many different questions of interest to psychological researchers.

Week of	<u>Topic</u>	Reading Assignment
1/23	Introduction, Statistics and the Research Process	G & W Ch 1
1/30	Frequency Distributions and Percentiles	G & W Ch 2
2/6	Measures of Central Tendency	G & W Ch 3
2/13	Measures of Variability	G & W Ch 4
2/20	z-Score Transformations and the Normal Curve Model; Percentiles	G & W Ch 5 & 6 (pp 180-184)
2/20	Exam 1	Chapters 1 thru 4
2/27	Describing Relationships Using Correlations	G & W Ch 16
3/6	Linear Regression and Predicting Variability	G & W Ch 16
3/13	Spring Break!	
3/20	Methods of Sampling, Sampling Distributions, Sampling Error; Probability & its Application to Hypothesis Testing	G & W Ch 6 & 7
3/20	Exam 2	Chapters 5, 6, & 16
3/27	Overview of Statistical Hypothesis Testing: The z-Test	G & W Ch 8
4/3	Significance Testing of a Single Sample Mean or a Correlation Coefficient: The t-Test	G & W Ch 9
4/10	Significance Testing of Two Sample Means: The t-Test	G & W Ch 10 & 11
4/10	Exam 3	Chapters 6 thru 9
4/17	One-Way Analysis of Variance	G & W Ch 13
4/24	Two-Way Analysis of Variance	G & W Ch 15
5/1	Two-Way Analysis of Variance	G & W Ch 15
5/1	Nonparametric Procedures for Frequency & G & W Ranked Data: Chi Square, Mann-Whitney U, Spearman Rank-Order Correlation Coefficient	<sup>7</sup> Ch 16 thru 19
5/15	FINAL EXAM	Cumulative
(7:30-10:15 a.m.)		

## **Course Grade Guidelines**

- 1. There will be four exams (3 mid-terms and one final) over the course of the semester. The 3 midterms will be worth a combined 50 points toward your fnal grade. The final exam will be worth 25 points. The course lab will also be worth 25 points. A cumulative make-up exam will be given at the end of the semester for students missed an earlier exam or would like to replace their lowest mid-term grade.
- 2. Students may earn up to 3 extra credit points toward their final grade by participating as a research subject in the psychology department's subject pool. More detail on how to sign up for research participation at the Experimetrix website will be given in class.
- 3. Please note that the final exam is scheduled for Monday, May 15 @ 7:30 a.m. Please do not plan on leaving town prior to this date and time.
- 4. You are responsible for all material that appears in any chapter that is covered during the semester, as well as for anything that is mentioned during a lecture or lab meeting. Exams will be based primarily, but not exclusively, on material that is specifically discussed in class.
- 5. Attendance at lectures and labs is voluntary, though strongly encouraged.
- 6. Any Honor Code violation related to exams will result in a report to the University Honor Committee.

## Use of Technology

The lab section for this course will include instruction in statistical analysis using SPSS software. All students in the class will also be expected to have an active email account, as some of the course assignments and test preparation materials will be made available only via email.

\*\* If you are a student with a disability and you need academic accommodations, please see me and contact the Disability Resource Center(DRC) at 703-993-2474. All academic accommodations must be arranged through that office.

\*\*\* Please note that the add and drop deadlines for this fall are February 7 to add and February 24 to drop. There is also an elective withdrawal period which runs from February 25 to March 24.