

STATISTICS

PSYCHOLOGY 343

SPRING 2008

Instructor: Dr. Ronald Pavone

Office: 1022A BSB; Mailbox 1009 BSB

Lecture Hours: 12:00-12:50 Monday and Wednesday in 305 Burnham Hall

Office Hours: 1:15 - 2:15 Mondays & 1:15 - 2:15 Wednesdays; and by appointment

Teaching Assistant: Christine Holland

Texts: Statistical Applications for the Behavioral Sciences, by L. Grimm, and,
The Student Study Guide and Workbook, by J. Britt and L. Grimm

The purpose of this course is to help you develop basic descriptive and inferential statistical skills. You will learn to conceptually understand, and to concretely apply, statistical procedures in the context of research data in the behavioral sciences. As you exercise and build these skills, you will be laying a foundation to better understand psychological literature and analyze data. In addition, this course is intended to help you strengthen your logical abilities to think more precisely, systematically, and critically.

This will be an enriching course, and a challenging course, both in content and work load. We will cover a great deal of material in the next 16 weeks. This material is cumulative, with each new topic building on your understanding of the information that preceded it. Therefore, it is **ESSENTIAL** that you keep up with the readings and that you complete your weekly Homework Exercises. You must not fall behind. You are strongly recommended to already have read each week's chapter, before you come to class. In addition, each week a Homework Assignment will be due and will be graded.

Your final grade will be based on four tests, and your homework. Total homework points will contribute 20% of your final grade, and each test also will contribute 20%. You will take your first three tests in Weeks 4, 8, and 13, and you will take your fourth test during Finals Week. Like the first three tests, the fourth test will be one hour long and it will cover specific chapters only since the most recent test. Thus, there will be no comprehensive final exam, at least in the usual sense of the word. However, as noted above, remember that the material you learn in Statistics will be foundational in nature, with new material systematically building on what has come before. In an important sense, then, your final test indeed will be "cumulative". Out of the total points possible during the semester, if you earn 90% you will get an "A"; 80% = "B"; 70% = "C"; 60% = "D".

Late Homework Assignments will not be accepted, and the policy for missed tests is as follows. If you must miss a test, a more difficult makeup test will be given. Makeup tests will have extra questions that will count against your grade if they are missed, but they will not add to your grade if they are answered correctly.

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P S Y C H O L O G Y 3 4 3

Course Schedule

<u>Week Beginning</u>	<u>Topic</u>	
1/14	Measurement and Displaying Data	Ch. 2
1/21	Central Tendency and Variability	Ch. 3, Ch. 4
	[No Class Monday 1/21]	[skip 56-58]
1/28	Variability [con'd]	Ch. 4
2/4	Test One on Monday	
	Normal Curve and z-Scores	Ch. 5
2/11	Sampling Distributions	Ch. 6
2/18	Single Sample Tests of Significance	Ch. 7
	z-Test and t-Test	
2/25	Independent Samples t-Test	Ch. 8
3/3	Test Two on Monday	
	The Chi-Square Test	Ch. 17
3/10	One-Way Analysis of Variance	Ch. 12
3/17	One-Way ANOVA [Con'd]	Ch. 12
3/24	-No Classes : Have a Good Spring Break!--	
3/31	Two-Way Analysis of Variance	Ch. 13
4/7	Two-Way ANOVA [Con'd]	Ch. 13
	Review for Test Three	
4/14	Test Three on Monday	
	Correlation	Ch. 15
4/21	Regression	Ch. 16
4/28	Integrating What You Have Learned:	Handout
	The General Linear Model	
5/5	Test Four during Finals Week	

[Any changes to be announced in class and are the responsibility of the student]

Weekly Discussion Section Homework Assignments: In each of your Weekly Discussion Sections, Homework Exercises will be due for grading. The Homework Exercises are found in The Student Study Guide and Workbook, at the end of each chapter. For each chapter and for each week, do **ALL** of the exercises. Your Homework Exercises are extremely important. They will provide you with consistent opportunities to systematically exercise your statistical knowledge. Through your weekly homework exercises, you will build points toward a full 20% of your final grade. It will be to your great benefit to invest considerable care and effort toward mastering the concepts and processes illustrated by your Statistics Homework Exercises.

Students with disabilities who require accommodations for access and participation in this course must be registered with the Office of Disability Services (ODS). Please contact ODS at (312) 413-2103 (voice) or (312) 413-0123 (TTY).

Prerequisites: PSCH 242 and ENGL 161 with a minimum grade of C; MATH 118 (or the equivalent) with a minimum grade of C or MATH 090; or consent of the instructor. For psychology and neuroscience majors only. Students who do not have prerequisites will be dropped from the course.