

Introduction to Statistics
PSY 204 OP (**HONORS**) Fall 2007

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Date	Topic	Text	Suggested Practice from the Study Guide
Aug 23	Th Terms & Scientific Method	Ch 1	
	Video #1		
28	Tu Basic Math & Rounding	Ch 2	#1 SG p.39 4 & 11
	Graphing Frequency Distributions p. 53-60 only	Ch 3	
30	Th Central tendency p. 66-75 Combined and Adjusted Means	Ch 4	SG p.63 1-4
Sep 4	Tu Variability/Standard Deviation Quartiles, Deciles, Stanines and percentiles	Ch 4	#2 SG p.63 5,8,9
6	Th Test 1(Ch 1-4)		
11	Tu The Normal Curve/ z-Scores	Ch 5	SG p.83 9,10,14,15
13	Th Determining the area under a normal curve		with the z-table
18	Tu Correlation	Ch 6	#3 SG p.102 1,2,3,6 (Practice Quiz on correlation)
20	Th Linear Regression	Ch 7	# 4 SG p.122 1,2,3,5,8 (Practice Quiz on Regression)
25	Tu Probability	Ch 8	#5 SG p.142 3,5,7, 14(a &c)
27	Th Finish Probability. review for test		(Practice Quiz probability)
Oct 2	Tu Test # 2 (Ch 5-8)		
4	Th Binomial Distributions	Ch 9	#6 SG p.158 1,3,7,10,13 (Practice Quiz Binomial)
9	Tu Binomial table		
11	Th Hypothesis Testing	Ch 10	#7 SG p.175 1,2,5,6,8 (practice quiz on sign test)
16	Tu Calculating Power	Ch11	#8 SG p.192 3,4,5 (Practice Quiz on power)
18	Th z-test and the Central Limits Theorem		
23	Tu Sampling Distributions ,z - Test Rice University demonstration Review for test	Ch 12	#9 SG p. 210 1,5,6,7,10a,12a&b (Practice Quiz on z-test)
25	Th Test # 3 (Ch 9-12)		
30	Tu Student's t-Test (Single Sample) (Confidence interval and Correlation)	Ch 13	#10 SG p.230 2-4,6,7,9,12 (Practice Quiz single t-test)
Nov 1	Th Group t-Test	Ch 14	#11 SG p.255 4,6,7

6	Tu	Effect Size (Demo) begin ANOVA		(Practice Quiz group t-test)
8	Th	Analysis of Variance	Ch 15	#12 SG p.293 1, 4,6,7,8 (Practice Quiz on ANOVA)
13	Tu	Multiple Comparisons	Ch 16	# 13 SG p. 297 14
15	Th	2-way ANOVA (Demo)	Ch 16	Read text p. 397-401
20	Tu	Chi-Square (Demo with Survey data)	Ch 17	#13 SG p.361 1,3,4,7, 9 (Practice Quiz Chi square)
22	Th	Thanksgiving Recess		
27	Tu	Other Nonparametric tests Review starting with z-test	Ch 17	(Practice Non-parametrics)
29	Th	Review & prepare for Final	Ch 18	

The Final Exam (Ch 13 -18): Thursday Dec 6 (8:00-10:30)

TEXT: Understanding Statistics in the Behavioral Sciences by Pagano, 8th Edition, and the accompanying study guide.

Prerequisites: You must have completed Math 101 or its equivalent and be in the Honors program to be eligible for this course. Furthermore, **if your basic math skills are weak, you will do poorly in this course and should strongly consider dropping now!!**

Notes: 1. This is a four credit Honors course. It will require more class time and more homework than a three credit course. There is a lot of material to cover in a short time. The best way to accomplish this is for each student to read the assigned chapter before the class for which the material is scheduled. This will reduce the amount of explanation and clarification required in class. **You must keep up with the reading, homework and the on-line practice quizzes** . Homework is for your benefit, it will not be collected. The answers can be found in the study guide. I will verify that you are reading the text carefully by asking questions on exams directly from the text.

2. I was an honors student in high school and in college. The concept means a lot to me. It is NOT just something to put on your resume. It means the course should be more challenging. It also means your fellow students should be more able. This course will cover much more material than my regular section. Most of you will need this material in the future whether you know it now or not. Therefore, the better your first course, the better prepared you will be for future statistics and research courses and the better you will be able to understand the complexities of the world we all live in.

3. **You will need a simple inexpensive calculator at all classes, all quizzes and all tests.** Graphing calculators are not permitted. You will also need your text book at most classes and tests.

4. **Grades:** Grades will be calculated on a total points basis with four 100 point tests. In the end I will add all of your exam scores and divide by 4 to get your course grade. Homework is considered to be crucial to your success but it will not be collected. **After the first exam** there will be **practice quizzes** and answer keys posted on the **Blackboard**

system. You are strongly encouraged to take these quizzes each week, and to grade them. Your success depends on your ability to keep up with this fast moving class. *If you are not prepared to do the reading, homework and practice quizzes every week, you should drop the course now.* A low grade will not give you honors credit.

5. Whether you like math or not, it is an essential part of your education. Not only is it one of the best exercises for the development of your brain, but it is also the basis of understanding and advancement in almost all professions. Business, marketing, industry, the physical and social sciences, law, accounting, medicine, sports all depend heavily on math and particularly on statistics. The difference between the low paid follower and the well paid leader is very often the grasp of statistics and research methodology. As you continue your education, this will become abundantly clear. Statistics is not just a course in college, it is the way our culture understands the world. I am confident that for most of you this is only your first exposure to statistics, not your last. Those of you who are Psychology majors will be expected to retain the concepts and procedures presented in this course when you get to upper level courses such as Psy 316, 332, 418, and 444.

6. Finally, I have been teaching at U. Miami since 1977. In recent years I have noticed that students have become more and more reluctant to speak up in class. In my classes I often seek 2-way communications. You will see that I often invite comments, questions and answers to my questions. Part of this emerging reluctance to speak may be due to my scary and intimidating appearance and gruff manner, but whatever has caused it, I would like to reverse it. I believe that college graduates ought to be confident about group participation. I would appreciate your suggestions on this point and your efforts to speak up confidently in class when you know the answer. Don't sit there waiting for someone else to do the work. Raise your hand and take a stab. You're just as good as the next student. Here's a chance to push yourself to work on those all-important group participation skills.