

Introduction to Statistics PSY 291 S Spring 2015

FLP 301 Tu & Th 3:30 – 4:45

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	<u>Topic</u>	<u>Text</u>	<u>Homework from text</u>
Jan	13 Tu Introduction to the course		
	15 Th Terms & Scientific Method	Ch 1 #1	p. 18: 1,2 (just list them), 6 a-c
	20 Tu Basic Math Concepts & rounding	Ch 2	p. 39: 2,3,4,6
	22 Th Frequency Distributions	Ch 3	Do practice Qiiz # 2 p. 47-49 and 61-69 only
	27 Tu Central tendency	Ch 4	p. 96: 3,7,10,12,14,15,22,23,30
	29 Th Variability/Standard Deviation	Ch4	p. 97: 31 a&c, 34
Feb	3 Tu Test # 1 on Chapters 1 through 4		
	5 Th Normal Curve/z-Scores	Ch 5 #2	p. 117: 3,4,5,7,8,10,11,12
	10 Tu Finish z-scores		
	12 Th Correlation	Ch 6	p. 149: 3,7,9,11,13,21
	17 Finish Correlation Begin regression	Ch 7	p. 179: 3,6,7,10
	19 Th Linear Regression		
	24 Tu Test #2 on Chapters 5 through 7		
	26 Th Probability	Ch 8 #3	p. 221:9,11,13,15,17,18
Mar	3 Tu Finish Probability		
	5 Th Hypothesis Testing	Ch 10	*Supplement on Blackboard*
	<u>Spring Break from March 7 to March 15</u>		
	17 Tu Power		Concepts only, no calculation
	19 Th z – Test	Ch 12	p. 324: 6,7,9,10,18,19,25
	24 Tu Central Limits Theorem Sampling Distributions (Rice Demo)_		
	26 Th Test # 3 on Ch 8,9,10 and 12		
	31 Tu <u>t</u> -Test (Single Sample)	Ch 13	p. 349: 2,4,8,11,16
Apr	2 Th finish single sample t-test		
	<u>Independent group t</u> -Test	Ch 14	p. 387: 3,4,9,18,21
	7 Tu Repeated Measures <u>t</u> - test (Confidence Intervals and significance of a correlation)		
	9 Th Analysis of Variance	Ch 15	p. 436: 4,6,9,19,22 a&c
	ANOVA p. 401 to 420 only		
	14 Tu (Multiple Comparisons Chapter 15 lecture only)		

(2 Way ANOVA Chapter 16 lecture and examples only)

16 Th Chi Square

Ch 17 p.515: 3,5,16,17

21 Tu Review of Inferential Statistics

Ch 18 Decision tree text p. 543

23 Th Review course and prepare for Final Exam

The Final Exam: Thursday Apr 30 from 2:00 to 4:30 PM in our regular classroom

TEXT: Understanding Statistics in the Behavioral Sciences by Pagano, 10th Edition, 2013

Notes: 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 greatly reduce the amount of explanation and clarification required in class. Your failure to prepare for class may slow course progress for all students. Homework is optional, but will help you better master the material being covered. **Additionally there are practice quizzes and answer keys on the Blackboard system. You should take and grade these quizzes to ensure that you are keeping up with the material. Falling behind is not an option.**

Make-up tests are strongly discouraged, and will be permitted only if a reasonable excuse is offered in a timely fashion.

You will need a simple, inexpensive, single line calculator at most classes, all quizzes and all tests. Graphing calculators are not permitted. You will also need the tables in the back of your textbook at tests 2, 3 and 4.

Attendance will be taken after test #3 (the last 8 classes only). Each class fully attended will result in 2 points (16 points total). No excuses will be accepted. Do not show up at the end of class to sign the attendance sheet or leave after you have signed in. Such behavior will be noticed and will not result in any points. Legitimate conflicts that require you to arrive late or leave early must be discussed with me during these last ten classes.

Grades: The course is based on a total of 416 points: four 100-point tests, and 16 attendance points).

My philosophy about math and statistics: 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, industry, every science, 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. Don't be one of those people who say "I only wish I paid more attention when I had the chance." 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 290 (was 316), 391 (was 332), 490 (was 418), and 491 (was 444). You are urged to take good notes that you can turn to when you get to more advanced classes. Keep those notes and strongly consider keeping the textbook for your reference shelf. Most students will be glad to have their old book when they revisit these ideas in a higher course. I turned to my first undergraduate statistics book many times in graduate school.