Department of Educational Psychology
EDP 380E 1: Fundamental Statistics
Unique #10463 Spring 2015 – Tu/Th 3:30-5:00, UTC 4.104

Instructor: **Dr. Sarah M. Collins**
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Office hours: SZB 538 Thursdays 2:00-3:30

Textbook: *Statistics for the Behavioral Sciences* by Gravetter and Wallnau (ninth edition). The textbook will be available at the Co-op.

Canvas Announcements, course handouts, some lecture notes, exam materials, and grades will be posted on the course Canvas site. If you have a question about the course, please check Canvas and the syllabus before emailing the instructor. **Please check periodically for updates and make sure you receive Canvas notifications. Please do not reply specifically to assignments on Canvas through their system, but rather send emails to smcollins@utexas.edu to ensure that I see them.**

Course Description: This course is designed to help you learn the introductory descriptive and inferential statistical procedures that are commonly used in research. You will learn the assumptions underlying common statistical procedures, the types of hypotheses that can be tested by these procedures, and the inferences that can be drawn from their results. After completing this course, you will have developed a sufficient foundation from which you can begin to conduct your own analyses and critically evaluate the statistical analyses of others.

- **What to Bring to Class Everyday:** A calculator, the packet of statistical tables on Canvas, and the formula sheet (this can also be found on Canvas).

Classroom Expectations: As lecture is an active learning environment, please refrain from using your cell phones or laptops – this is distracting to both the instructor and your peers. Learning statistics includes a great deal of quantitative analysis and hand manipulations of data. Studies indicate that this kind of material is retained better if people take notes by hand.

Description of Assignments:

Graded:

Quizzes: There will be five quizzes that test material from the lecture. You must be present for credit.

In-Class Exams: There will be three in-class exams. These will include calculations and word problems. If you are late you will not receive additional time. You will be able to use your (non-graphing) calculator, a formula sheet that will be available all semester on Canvas (I'll provide clean copies for the exam), and any relevant statistical tables.

Undgraded:

Homeworks: There will be homework problems assigned from the book that correspond to the topics we will cover in class. Although these are not graded, they are highly recommended, and I will be more than happy to discuss these problems with you during office hours.

Although they will not be graded, I may assign small projects for you to complete and bring to class (for example, I may ask you to think about how a particular statistical concept applies to your field of study and find a relevant article, etc.) I favor a very active learning environment and encourage questions throughout the lecture.

Attendance: Attendance will not be taken during each class, but it is highly recommended that you attend. There may be concepts that are tested which were discussed to a different degree than can be found in the textbook.

- If you miss a quiz or in-class exam, you will not be able to retake it. If you have exceptional circumstances or a serious illness, you must notify me ***before*** a quiz or exam is due so that we can discuss your options.

Students with Disabilities: The University of Texas provides upon request appropriate academic accommodations for qualified students with disabilities. For more information, contact the Office of the Dean of Students at 471-6259, 471-6441 TTY.

Grading:	200 points	Quizzes (5 @ 50 points each, but only 4 will be counted – lowest dropped)
	300 points	Exams (3 @ 100 points each)
	Total Possible Points: 500 points	

Grade cutoffs:

A (93%)
A- (90%)
B+ (86%)
B (83%)
B- (80%)
C+ (76%)
C (73%)
C- (70%)
D+ (66%)
D (63%)
D- (60%)

Note: Grade cutoffs are firm.

EDP Course Outline Spring 2015 *Please note this schedule is subject to flexibility.*				
Class	**Lessons**	**Chapters**	**Date**	**Assignment/Quizzes**
1	Introduction to the Course, Variation as a Concept, Notation	1	1/20	
2	Frequency Distributions	2	1/22	
3	Measures of Central Tendency and Variability	3 and 4	1/27	
4	Z-Scores	5 & 6 (164-184, 189 on)	1/29	
5	Z-Scores		2/3	Quiz #1
6	Correlation	15	2/5	
7	Regression	16	2/10	
8	Regression	16	2/12	Quiz #2
9	Multiple Regression		2/17	
10	**Exam 1**		**2/19**	
11	Sampling Distributions and Hypothesis Testing	7 & 8	2/24	
12	Sampling Distributions and Hypothesis Testing		2/26	
13	Confidence Intervals (CI) for Proportions & Hypothesis Testing (HT) for Proportions		3/3	
14	Hypothesis Testing (HT) for Proportions		3/5	
15	2 Proportion CI & HT		3/10	Quiz #3
16	2 Proportion CI & HT		3/12	
Spring Break March 16-20 – NO CLASS				
17	Chi-Square	17	3/24	
18	Chi-Square	17	3/26	
19	**Exam 2**		3/31	
20	Sampling & Mean Sampling Dist.	9	4/2	
21	Confidence Intervals for Means	9	4/7	
22	t Statistic, One Sample Hypothesis Testing	9	4/9	
23	One Sample Hypothesis Testing Cont., Two Sample Hypothesis Testing	10	4/14	Quiz #4
24	Two Sample Hypothesis Testing, Cont.		4/16	
25	t Test for Related Samples	11	4/21	
26	ANOVA	12	4/23	
27	ANOVA	12	4/28	Quiz #5
28	Experimental Design		**4/30**	
29	Review		**5/5**	
30	**Exam 3**		**5/7**	

Recommended Homework Problems *(some may be added as the semester progresses)***:**

Chapter 1	10, 12, 20, 22
Chapter 2	6, 10
Chapter 3	4, 10, 22, 24
Chapter 4	2, 7, 8, 22
Chapter 5	1, 6, 22
Chapter 6	6, 10, 18, 19
Chapter 7	4, 8, 10, 16, 20, 22
Chapter 8	4, 6, 15, 20, 21
Chapter 9	2, 5, 6, 12c, 13bc, 18, 21c, 22, 23
Chapter 10	3, 6, 10, 14a, 21, 22a
Chapter 11	1, 10a,20, 22, 23
Chapter 12	10, 12, 19, 21a, 21b
Chapter 15	5, 9, 10, 12, 14
Chapter 16	3, 4, 6, 8, 10a
Chapter 17	2, 4, 11, 14, 20, 25