EDP 371 – Introduction to Statistics
Spring 2012 -Unique Number: **10365**   **TTh: 11:00-12:30**   **CBA 4.328**
Spring 2012 -Unique Number: 10370   **TTh: 2:00 – 3:30**   **RLM 6.120**

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Course Description:
    This course is designed to help students learn the introductory descriptive and inferential statistical procedures that are used in behavioral and social science research studies. Students will learn the assumptions underlying, the hypotheses being tested by, and the inferences that can be made with the use of the procedures. These skills will provide the student with a basis to conduct their own such analyses and to evaluate critically others' uses of statistics.

Quantitative Reasoning:
    This course carries the Quantitative Reasoning flag. Quantitative Reasoning courses are designed to equip you with skills that are necessary for understanding the types of quantitative arguments you will regularly encounter in your adult and professional life. You should therefore expect a substantial portion of your grade to come from your use of quantitative skills to analyze real-world problems.

Pre-requisites
    Mathematical skills: While this course is not completely mathematical, it is founded upon the use of mathematical tools. Thus some fundamental mathematical skills are essential for successful mastery of the material. Students are expected to have basic algebra skills including the ability to solve single variable equations. Students should have a basic understanding of exponents and square roots, as well as the order of operations, proportions, fractions, decimals, percentage, and negative numbers. Pages in Appendix A of the textbook contain a review of the basic math skills needed for this course.
    Calculator: Students are required to bring to class a scientific calculator that can be used to sum, multiply, take the square root and square of numbers. Calculators are recommended for use with class assignments and tests as well as during class time. During in-class exams, you must use a calculator that does not have the capacity to connect to email (use of cell phones is completely **forbidden** during exams).

Course Materials and Resources

Required: Integrative Statistics for the Social and Behavioral Sciences: Ha & Ha; Sage 2012. This textbook is available at the Co-op. It also provides a good resource in that it presents the material in a slightly different way than the instructor presents the material during class time.

Optional: Class notes discussed in class will be available on Blackboard

Exams

There will be three exams. The exams will focus on the material covered during the most recent class segment. These exams provide students with an incentive to synthesize the material being covered and an opportunity to practice the skills being learned. More detail will be provided about the material assessed by each exam closer in time to the actual exams. It should be noted that most of the statistical skills acquired during this class are constantly building upon earlier learning. This means that even though each exam will focus on the preceding section of the course, students might need to recall skills learned in earlier sections!

Format: Exams will consist of short-answer questions and problem solving including both conceptual and computational problems. Students will be given one class period to complete the exam.

Materials: Students will be given a formula sheet and necessary tables for each exam. Students should bring a calculator.

Proportion of final grade: Exams are weighted equally and worth a total of *100%*.

Makeups

Each student will have the opportunity to re-take an exam of his or her choice with no penalty. Also students who miss an exam will be able to re-take the exam that they missed…but no other exam. All make-ups will be taken on the date of the scheduled final exam. The room, date, and time of this exam will be determined later.

The only exception to the above make-up policy will be for those students who miss class without a valid excuse (a doctor's note). Students who miss class will not be allowed to take make up exams unless the reason for make –up is illness or some other validated emergency on the day of the exam.

Attendance Policy

Attendance at all classes is required. Attendance will be taken on a random basis and those students who are not in class on that occasion will lose the opportunity to take a make-up exam.

Homework

Periodically throughout the semester homework assignments will be given. You will have one week to turn in these assignments. The assignments will consist of problem solving activities like those given in the class exams. You will get feedback on the assignments but they will not be graded. They are an opportunity for you to check how will you have learned important skills that will be evaluated on the three class exams.

Grading system

Grades are assigned based on the percentage of accumulated points:

Overall Course Percent	*Grade*

93% - 100%	A
90% - 92%	A-
86% - 89%	B+
83% - 85%	B
80% - 82%	B-
76% - 79%	C+
73% - 75%	C
70% - 72%	C-
66% - 69%	D+
63% - 65%	D
60% - 62%	D-
Below 60%	F

Scholastic dishonesty policy

The University defines academic dishonesty as cheating, plagiarism, unauthorized collaboration, falsifying academic records, and any act designed to avoid participating honestly in the learning process. Scholastic dishonesty also includes, but is not limited to, providing false or misleading information to receive a postponement or an extension on a test or other class assignment, and submission of essentially the same written assignment for two courses without the prior permission of faculty members.

By accepting this syllabus and participating in this course, you have agreed to these guidelines and *must* adhere to them. This means (specifically for this class) that any work that you hand in for a grade _**MUST**_ be your own work. This also means that you may _**NOT**_ use or review the exams of students of this class from previous semesters.

Violation of this agreement and of any of the University rules on scholastic dishonesty will result in the student being awarded an *F for the final course grade*, being referred to the appropriate university officials, and may result in suspension or expulsion from the University. For more information on scholastic dishonesty, students may review the Student Judicial Services web-site: http://www.utexas.edu/depts/dos/sjs/.

Disability Accommodation

Students with disabilities who require special accommodations need to get a letter that documents the disability from the Services for Students with Disabilities area of the Office of the Dean of Students (471-6259 voice or 471-4641 TTY for users who are deaf or hard of hearing). This letter should be presented to the instructor in each course at the beginning of the semester and accommodations needed should be discussed at that time. Five business days before an exam, the student should remind the instructor of any testing accommodations that will be needed. See the following website for more information: http://deanofstudents.utexas.edu/ssd/providing.php

Communication

In this course _**e-mail**_ will be used as a means of communication with students. You will be responsible for checking your e-mail regularly for class work, deadlines, changes and announcements.

You will also be responsible for checking the Blackboard course site regularly for class work, announcements, and copies of the lecture notes. As with all computer systems, there are occasional scheduled downtimes as well as unanticipated disruptions. Notification of these disruptions will be posted on the Blackboard login page. Blackboard is available at

http://courses.utexas.edu. Support is provided by the ITS Help Desk at 475-9400 Monday through Friday 8 am to 6 pm, so plan accordingly.

Hints for success

Practice: Practice will facilitate successful mastery of the skills to be learned from this class. During class periods, guided practice will be offered in the form of sample problems. The homework and review question assignments will also provide opportunities for practice. It is hoped that studying for and completion of exams will provide additional such opportunities.

Textbook: You are responsible for whatever topics are covered in class. We do not necessarily cover all the material in the textbook. The terminology in the textbook sometimes differs from what we use in class. Use the terminology I use in class.

Study groups: It is highly recommended that you form study groups to master the material in this class. If you understand a concept, teaching it to your fellow students will help you solidify that learning. If you do not understand a concept, it might help to have it presented to you by someone who has more recently mastered it than the TA or instructor. It can help to have a concept presented by several people in different ways.

Office hours: Use them – our job is to help you learn! If you cannot make our office hours, ask us after class or via email to schedule another time to meet with me or the TA.

Email I: Check your email messages from me and the TA.

Email II: Use email to schedule appointments ___NOT___ to ask conceptual or computational questions. We will not answer those questions online because hand-feeding you the answer(s) does not help your learning as much as our prompting **you** (face-to-face) to come up with the answer.

Email III: (and most important) If you email one of us (professor or TA), please copy ___both___ of us on the email. That ensures a speedier response.

Class notes: If a student misses class, it is his/her responsibility to obtain any missed information from a classmate – ___not___ from the instructor, ___nor___ from the TA.

Keep up: The skills to be mastered for statistical analyses keep building upon themselves. If you fall behind, it will not only affect the topic in which you are behind but will affect your learning of a later topic.

Introduction to Statistics, Spring 2012
EDP 371
Tentative Schedule of Topics

Date:	Topic	Reading
Tu 1/17	Syllabus, course requirements, course content, etc. *Introduction:* ▪ Vocabulary	Chapter 1
Thu 1/19	*Intro* (cont'd) ▪ 4 scales of measurement ▪ Statistical notation	Chapter 2

Tu 1/24	*Frequency distributions of scores:* ▪ Tables ▪ Graphs ▪ Shape ▪ Percentiles	Chapter 3
Thu 1/26	***Frequency distributions and graphs (cont'd)***	Chapter 3
Tu 1/31	***Measures of central tendency*** ▪ Mean ▪ Median ▪ Mode	Chapter 4
Thu 2/2	***Measures of variability:*** • Standard Deviation • Variance ▪ Range ▪ IQ & SIQ Range ▪	Chapter 4
Tu 2/7	***CritiquingStatistics presented by others***	Ch's 1-4

Date:	Topic	Reading
Thu 2/9	*First Exam*	
Tu 2/14	*Normal Distribution/Standard Scores/Probability*	Chapter 5
Thu 2/16	*Normal Distribution/Standard Scores/Probability (cont'd)*	Chapter 5
Tu 2/21	*Sampling Distributions/z tests*	Chapter 6
Thu 2/23	*Inferential Statistics*	Chapter 7
Tu 2/28	*Single-Sample tests*	Chapter 8
Thu 3/1	*Single-Sample tests* (cont'd)	Chapter 8
Tu 3/6	*Two-Sample Tests*	Chapter 9
Thu 3/8	*Two-Sample Tests* (cont'd)	Chapter 9
Tu 3/20	**Review for Exam 2**	
Thu 3/ 22	**Exam 2**	
Tu 3/27	**ANOVA**	Chapter 10
Thu 3/29	**ANOVA (cont'd)**	Chapter 10
Tu 4/3	**Correlation/Regression**	Chapter 12
Thu 4/5	**Correlation/Regression (cont'd)**	Chapter 12
Tu 4/10	**Nonparametric Tests**	Chapter 14
Thu 4/12	**Nonparametric Tests (Cont'd)**	Chapter 14
Tu 4/17	**Nonparametric tests (cont'd)**	Chapter 14

Thu 4/19	**Nonparametric Tests (cont'd)**	
Tu 4/24	**Econometric Statistics**	
Thu 4/26	**Medical Statistics**	
Tu 5/1	**Review Final exam**	Chapter 15
Thu 5/3	**Final Exam**	

Summary:

Exams: 2/09, 3/22, 5/3 These dates and times are not negotiable and will not change.