BSTAT 3321-002 : Business Statistics 1 Syllabus Fall 2013

MWF 1:00P - 1:50P ROOM 349 BUSINESS BUILDING

Instructor: Dr. Esimai

Office: 611 Business Building

Telephone & Voice Mail: 817 - 272 - 3508 **Office Hours: MW** 12:00 - 1:00 p.m.

Mailbox: Box 19437 U.T.A E-mail: Use the blackboard only

Webpage: http://www.uta.edu/ra/real/faculty/gosimai

Course Prerequisites:

BUSA 2303 and Math 1316 (or business calculus) plus knowledge of use of a PC package with statistical capabilities (Excel)

<u>Textbook:</u> Statistics for Managers. Using Microsoft Excel. Sixth Edition by Levine, Stephan, Krehbiel and Berenson. Pearson Learning Solutions.

If you will take either BSTAT 3322 or BSTAT 5325, you are advised to buy the full text. All other 3321 students may buy the cheaper, soft-cover custom edition for UTA. Please ensure that you purchase the text that best meets your needs.

Course Description:

(3 hours credit) Application of Statistical techniques to business and economic data. Topics include descriptive statistics, probability distributions, estimation, hypothesis testing, inference and simple linear regression and correlation.

Student Learning outcomes

- 1. The student will be able to explain the rationale for randomness in data collection, select a simple random sample and describe a data set verbally, graphically, and numerically.
- 2. The student will be able to apply the complement, addition, and multiplication laws of probability.
- 3. The student will be able to distinguish between discrete and continuous random variables, find binomial and normal probabilities using tables, and compute expected value and variance for a binomial distribution.
- 4. The student will be able to state the Central Limit Theorem and use the sampling distributions to find probabilities for the sample mean and sample proportion.
- 5. The student will be able to construct and interpret confidence intervals for a population mean and a population proportion and to determine sample sizes for given levels of confidence and margins of error.
- 6. The student will be able to test hypotheses about a population mean and a population proportion and to interpret the results.
- 7. The student will be able to fit and interpret simple linear regression models along with the usual inferences.
- 8. The student will be able to construct graphs, compute descriptive statistics, make inferences and fit simple regression models using appropriate software such as Excel.

Grading Policy:

Participation 20 points
Quizzes 60 points
Tests 300 points
Final Exam 100 points

TOTAL 480 points

GRADES: Divide your total points by 4.8 and assign a grade as follows:

A= 90-100; B= 80-89; C= 70-79; D= 60-69; F= below 60

Attendance: You are responsible for all material covered in class even on days that you are absent. So please plan to be in class.

Quizzes, Tests and Make-ups:

Quizzes and Tests will be multiple choice or T/F and will be administered using the Blackboard. No makeup quizzes or tests will be given. If you must miss a test due to unforeseen circumstances, the instructor must be informed immediately and permission obtained BEFORE the test. If you miss a test or quiz without prior knowledge AND/OR permission of the instructor, a zero will be given for that test or quiz.

Class Expectations:

- Attend all class meetings promptly. Ask questions during lecture if you do not understand something.
- Read a chapter before the corresponding lecture.
- Ask questions as needed during class.
- Remain in class until dismissed or until class time expires.
 Class disruption such as talking without permission during a lecture or leaving early without permission may result in a grade of zero on the previous quiz.
- No cell phones in sight, no books or bags on the desks during guizzes or tests.
- If you encounter or envisage problems, visit your instructor during office hours for help well before a test or final exam.
- The instructor has the right to make changes to the syllabus as necessary. Students have the responsibility to note these changes.

Drop Policy and important dates:

Last day to drop a class and receive an automatic: "W" Oct. 30, 2013

Census Date: Sept. 9, 2013

A student will not be dropped automatically for failure to attend class **.

Last day of classes: Dec 4, 2013

Final Exam: Saturday, Dec 7, 2013 from 9:00am -11:30am in 339BB

Last day to report conflict of final exam schedule with another UTA course final: Sept. 9, 2013.

<u>Academic Dishonesty:</u> *** This is completely unacceptable in any form.

<u>Student with Disability:</u> *** For this course, reasonable accommodation is provided to all students with disability. Please let us know early enough if you need any extra help.

** Withdrawal: If for some reason, you must withdraw from this class, it is your responsibility to fill out a drop form for the course.

***See the UTA policies attached below.

BSTAT 3321: BUSINESS STATISTICS 1 FALL, 2013 TENTATIVE LECTURE SCHEDULE

Goal: This course teaches effective statistical methods of obtaining, presenting and analyzing data for making meaningful business decisions.

DATE	TOPIC	CHAPTERS
Aug. 22 - 23	Introduction	<u>.</u>
Aug. 26 – 30	Intr., Organizing and Visualizing data	Ch. 1&2
Sept. 2 – 6	Organizing and Visualizing data	Ch. 2
Sept. 9 – 13	Numerical Descriptive Measures	Ch. 3
Sept. 16 – 20	Test 1 on Chs. 1-3 Basic Probability	Ch. 4
Sept. 23 – 27	Discrete Probability Distributions	Ch. 5
Sept. 30-Oct. 4	The Normal Distribution & Cts. Prob. Distributions	Ch. 6
Oct. 7 – 11	Test 2 on Chs. 3 – 6	
Oct. 14 – 18	Sampling and Sampling Distributions	Ch. 7
Oct. 21 – 25	Confidence Interval Estimation	Ch. 8
Oct. 28- Nov. 1	Confidence Interval Estimation	Ch. 8
Nov. 4 – 8	Fundamentals of Hypothesis Testing	Ch. 9
Nov. 11 – 15	Fundamentals of Hypothesis Testing	Ch. 9
Nov. 18 – 22	Test 3 on Chs. 7 – 9 Simple Linear Regression	Ch. 13
Nov. 25 – 27	Simple Linear Regression	Ch. 13
Nov. 28 – 29	THANKSGIVING HOLIDAYS	Ch. 13
<u>Dec. 2 – Dec. 4</u>	Review	
<u>Dec. 7</u>	FINAL EXAMINATION 9:am - 11:30:am Room	339BB

Americans With Disabilities Act:

The University of Texas at Arlington is on record as being committed to both the spirit and letter of federal equal opportunity legislation; reference Public Law 92-112 - The Rehabilitation Act of 1973 as amended. With the passage of federal legislation entitled *Americans with Disabilities Act (ADA)*, pursuant to section 504 of the Rehabilitation Act, there is renewed focus on providing this population with the same opportunities enjoyed by all citizens.

As a faculty member, I am required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Student responsibility primarily rests with informing faculty of their need for accommodation and in providing authorized documentation through designated administrative channels. Information regarding specific diagnostic criteria and policies for obtaining academic accommodations can be found at www.uta.edu/disability. Also, you may visit the Office for Students with Disabilities in room 102 of University Hall or call them at (817) 272-3364.

Academic Integrity:

It is the philosophy of The University of Texas at Arlington that academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University.

"Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts." (Regents' Rules and Regulations, Series 50101, Section 2.2)

Student Support Services Available

The University of Texas at Arlington supports a variety of student success programs to help you connect with the University and achieve academic success. These programs include learning assistance, developmental education, advising and mentoring, admission and transition, and federally funded programs. Students requiring assistance academically, personally, or socially should

FIRE Evacuation Procedures

it to any lower floor stairwell to assist disabled persons.

In the event of an evacuation of the College of Business building, when the fire alarm sounds, everyone must leave the building by the stairs. With the fire alarm system we now have, the elevators will all go to the first floor and stay there until the system is turned off. All those in the North tower side of the building should proceed to the fire escape stairs

located on the East and West sides of that wing.

<u>FOR DISABLED PERSONS</u>.....please go to the Northeast fire stairs. We have an evacuation track chair located on the 6th floor stairwell. We have people trained in the use of this chair and there will be someone that will go to the 6th floor to get the chair and bring

Should this be a real emergency, the Arlington Fire Department and UTA Police will also be here to help.