**Instructor:** Kimberly Whitehead

Office Number: COBA 516

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Office Hours: Tuesday & Thursdays 1:30 to 2:30pm

By appointment for other times.

**Course Number, Section** 

Number and Course Title: BSTAT 3321, Section 009

**Business Statistics I** 

Co/Prerequisites: INSY2303 and Math 1315 (or business calculus)

Time and Place of

Class Meetings: Tuesday and Thursday

5330PM - 4:50PM, COBA 239

**COURSE DESCRIPTION:** (From catalog) Application of statistical techniques to business and economic data. Topics include descriptive statistics, probability distributions, estimation, inference, regression, correlation, and time series.

**COURSE OBJECTIVE:** The course introduces the student to the basic principles and applications of descriptive and inferential statistics. The course assists students to become knowledgeable consumers of statistical analysis, its applications and limitations.

### **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.

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#### **REQUIRED TEXT BOOK AND MATERIALS:**

- 1. Statistics for Managers: Using Microsoft®Excel, Sixth Edition by Levine, et. al.
- 2. A Spreadsheet PC package (preferably Excel) that has some statistical capabilities.
- 3. Scantrons for each exam (Form No. 882-E skinny green form)
- 4. A basic calculator that can do arithmetic operations and square roots

### **GRADING POLICY:**

Grade Assignment	Grade Determination	
A: 90 to 100	20%	Exam 1
B: 80 to 89	20%	Exam 2
C: 70 to 79	20%	Exam 3
D: 60 to 69	30%	Comprehensive Final Exam
F: below 60	10%	Homework

The class schedule is attached to this syllabus and is available on Blackboard. The schedule is subject to change. It is your responsibility to check Blackboard often to look for possible changes to the schedule. It is also your responsibility to check your email daily in case you are sent correspondence regarding this class.

**EXAMS:** There will be four closed book exams. One, single two-sided study sheet (8 ½ by 11 inches) will be allowed for each exam. You may include anything on the study sheet. You need to bring a calculator (calculators will <u>not</u> be provided), scantron, photo ID, and pencil. I reserve the right to assign seating for test periods. Students are required to take tests at the scheduled time. Tests will not be accepted after the end of the scheduled time. All electronic devices such as laptops, PDAs, cellphones must be stored away and not on your person during exams. If bad weather prevents a class from being held, then the schedule will be moved down a class day.

**MAKE-UP EXAM POLICY**: There are no make-up exams. If you must miss an exam for any reason, please notify me at your first opportunity. At my discretion you may be allowed to count the Final Exam to replace the missing exam. The final cannot be used to replace more than one exam. Everyone is expected to take the final. I strongly encourage you to not miss a test since a large percentage of your grade would be determined by the final.

**BLACKBOARD:** We will be using Blackboard for this class. You can access the Blackboard at https://elearn.uta.edu/. You will need to use your Net ID and password to access your class information. It is the student's responsibility to check blackboard for the syllabus and any changes to the syllabus, class assignments, and other course materials that will be made available. Homework may be turned in through blackboard. You may use MS Word, MS Excel, or you can scan your homework into a PDF file for submission through blackboard.

**ATTENDANCE POLICY:** Attendance is mandatory and part of your grade. Additionally, students are required to read and be prepared to discuss the assigned textbook chapters and homework exercises on the scheduled class days. Class attendance and lateness policies will be discussed during the first week of class. Those policies include all provisions for grade adjustment or drop policies included in the applicable Graduate or Undergraduate Catalog in effect at the start of the semester. **NO STUDENT WILL BE DROPPED FROM THE CLASS ROLLS FOR NEVER ATTENDING OR EXCESSIVE ABSENCES**.

**LAPTOPS:** As a courtesy to your fellow classmates and instructor you are asked to only use a laptop, PDA, IPad, etc. in class if you are genuinely using it for class purposes (ie. taking notes, reviewing powerpoint, etc.) I

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reserve the right to ask that these devices not be used in class if they distract from class lectures or activities. These and all other electronic devices must be stored and not on your person during exams.

ABSENCES BASED ON RELIGIOUS BELIEFS: A student who misses an examination, work assignment, or other project due to the observance of a religious holy day will be given the opportunity to complete the work missed within 15 days following the due date of the assignment, test, or other project missed. To be eligible for such a make-up, the student must notify me in writing of classes scheduled on dates he or she will be absent to observe a religious holy day. Notification must be made within the first 15 (fifteen) class days through either a written correspondence, personal delivered, acknowledged and dated by me or written correspondence sent certified mail, return receipt requested to me. Failure to follow the rules provided above within the time frames listed will result in the absence being considered unexcused.

**DROP POLICY:** Refer to the university drop policy as posted on the university website, www.uta.edu.

**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 provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. These resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals to resources for any reason, students may contact the Maverick Resource Hotline at 817-272-6107 or visit www.uta.edu/resources for more information.

The business school offers a statistics tutoring lab on the 6<sup>th</sup> floor of the COBA building. It is provided as a resource to you every day Mon-Fri and sometimes on Saturday. You are highly encouraged to visit the lab for homework and project help, and while studying for tests.

There is also an INSY lab on the 3<sup>rd</sup> floor that offers tutoring. You may visit this lab for assistance with excel.

**E-CULTURE POLICY:** The University of Texas at Arlington has adopted the University email address as an official means of communication with students. Through the use of email, UT-Arlington is able to provide students with relevant and timely information, designed to facilitate student success. In particular, important information concerning registration, financial aid, payment of bills, and graduation may be sent to students through email.

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All students are assigned an email account and information about activating and using it is available at <a href="https://www.uta.edu/email">www.uta.edu/email</a>. New students (first semester at UTA) are able to activate their email account 24 hours after registering for courses. There is no additional charge to students for using this account, and it remains active as long as a student is enrolled at UT-Arlington. Students are responsible for checking their email regularly.

GRADE GRIEVANCE POLICY: The University's grade grievance policy can be found in the University catalog.

BOMB THREATS: Effective April 8, 1997, the College of Business Administration has adopted a policy to deal with the classroom disruption caused by bomb threats in the building. (A) Section 22.07 of the Texas Criminal Law Statutes governs terrorist threats and classifies bombs threats as Class A misdemeanors. Section 12.21 of the Texas Criminal Law Statues states that a Class A misdemeanor is punishable by (1) a fine not to exceed \$4,000, (2) a jail term of not more than one year, or (3) both such a fine and confinement. (B) If anyone is tempted to call in a bomb threat, be aware that UTA will soon have technology to trace phone calls. (C) Every effort will be made to avoid cancellation of presentation/tests caused by bomb threats to the Business Building. Unannounced alternate sites will be available for these classes. If a student who has a class with a scheduled test or presentation arrives and the building has been closed due to a bomb threat, the student should immediately check for the alternate class site notice which will be posted on/near the main doors on the south side of the Business Building. If the bomb threat is received while class is in session, your instructor will ask you to leave the building and reconvene at another location. (D) Students who provide information leading to the successful prosecution of anyone making a bomb threat will receive one semester's free parking I the Maverick Garage across from the Business Building. UTA's CrimeStoppers will provide a reward to anyone providing information leading to an arrest. To make an anonymous report, call 817-272-5245.

**EVACUATION PROCEDURES:** 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.

**FOR DISABLED\_PERSONS:** Please go to the Northeast fire stairs. We have an evacu track chair located on the 6<sup>th</sup> floor stairwell. We have people trained in the use of this chair and there will be someone that will go to the 6<sup>th</sup> floor to get the chair and bring it to any lower floor stairwell to assist disabled persons. Should this be a real emergency, the Arlington Fire Department and UTA Police will also be here to help.

THE INSTRUCTOR RESERVES THE RIGHT TO MAKE CHANGES TO THE SYLLABUS AS NECESSARY; IT IS THE STUDENT'S RESPONSIBILITY TO BE AWARE OF THESE CHANGES.

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Day	Course Content	Reading Prior to Class / Materials Needed for Class	Assignment Due
Tuesday, January 14, 2014	REVIEW SYLLABUS	SYLLABUS	
	INTRODUCTION TO STATISTICS	REVIEW CLASS BLACKBOARD BEFORE CLASS	
Thursday, January 16, 2014	CHAPTER 1	READ CHAPTER 1	
	INTRODUCTION TO EXCEL	BRING LAPTOP WITH EXCEL	
Tuesday, January 21, 2014	REVIEW HOMEWORK	READ CHAPTER 2	
	EXCEL EXAMPLES AND START CHAPTER 2 SLIDES		ASSIGNMENT 1
Thursday, January 23, 2014	FINISH CHAPTER 2 SLIDES		
Tuesday, January 28, 2014	REVIEW HOMEWORK START CHAPTER 3 SLIDES	READ CHAPTER 3	ASSIGNMENT 2 - TABLES AND GRAPHING
Thursday, January 30, 2014	FINISH CHAPTER 3 SLIDES		
	REVIEW HOMEWORK		ASSIGNMENT 3 - DESCRIPTIVE STATISTICS
Tuesday, February 4, 2014	EXAM 1		
Thursday, February 6, 2014	REVIEW TEST 1	READ CHAPTER 4	
	START CHAPTER 4 (PROBABILITIES)		
Tuesday, February 11, 2014	FINISH CHAPTER 4 ( DECISION TREES)		
			ASSIGNMENT 4A - PROBABILITIES
Thursday, February 13, 2014	REVIEW HOMEWORK START CHAPTER 5	READ CHAPTER 5	
	START CHAPTER 5		ASSIGNMENT 4B - DECISION TREES
Tuesday, February 18, 2014	FINISH CHAPTER 5		
Thursday, February 20, 2014	REVIEW HOMEWORK	READ CHAPTER 6	ACCIONMENT E DISCRETT DROPARILITY
	START CHAPTER 6		ASSIGNMENT 5 - DISCRETE PROBABILITY DISTRIBUTIONS

Day	Course Content	Reading Prior to Class / Materials Needed for Class	Assignment Due
Tuesday, February 25, 2014	CHAPTER 6	READ CHAPTER 6	
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Thursday, February 27, 2014	REVIEW HOMEWORK		
	REVIEW FOR EXAM 2		ASSIGNMENT 6 - BINOMIAL DISTRIBUTION
Tuesday, March 4, 2014	EXAM 2		
Thursday, March 6, 2014	REVIEW EXAM 2		
	IN CLASS ACTIVITY		
Tuesday, March 11, 2014			
	SPRING BREAK		
Thursday, March 13, 2014	WEEK		
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Tuesday, March 18, 2014	START CHAPTER 7	READ CHAPTER 7	
Thursday, March 20, 2014	CHAPTER 7		
111d13day, Warcii 20, 2014	CHAITER 7		ASSIGNMENT 7A - NORMAL DISTRIBUTION
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Tuesday, March 25, 2014	REVIEW HOMEWORK	READ CHAPTER 8	
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Thursday, March 27, 2014	REVIEW HOMEWORK		
	CHAPTER 8		7
			7
Tuesday, April 1, 2014	REVIEW HOMEWORK		
	START CHAPTER 9		ASSIGNMENT 8 - CONFIDENCE INTERVALS
			7

Day	Course Content	Reading Prior to Class / Materials Needed for Class	Assignment Due
Thursday, April 3, 2014	EXAM 3		
Tuesday, April 8, 2014	REVIEW EXAM 3		
	CONTINUE CHAPTER 9		
Thursday, April 10, 2014	REVIEW HOMEWORK		ASSIGNMENT 9A - HYPOTHESIS TESTING
	FINISH CHAPTER 9		
Tuesday, April 15, 2014	REVIEW HOMEWORK		ASSIGNMENT 9B - HYPOTHESIS TESTING
	REVIEW ADDITIONAL EXAMPLES IN CLASS		
Thursday, April 17, 2014	CHAPTER 13 LINEAR REGRESSION	READ CHAPTER 13	
	BRING YOUR LAPTOP.		
Tuesday, April 22, 2014	LINEAR REGRESSION		
	BRING YOUR LAPTOP.	HOMEWORK WILL BE DONE IN CLASS - IN GROUPS	ASSIGNMENT 10A - IN CLASS
Thursday, April 24, 2014	LINEAR REGRESSION		
	BRING YOUR LAPTOP.	REVIEW HOMEWORK AND COMPLETE REGRESSION	ASSIGNMENT 10B - LINEAR REGRESSION
Tuesday, April 29, 2014	REVIEW FOR FINAL	COMPLETE REVIEW QUESTIONS	
Thursday, May 1, 2014	REVIEW FOR FINAL		LAST DAY OF CLASS
			LAST DAT OF CLASS
Thursday, May 8, 2014	COMPREHENSIVE FINAL EXAM		
	2-4:30PM		