

BSTAT 3321
Introduction to Business Statistics
Spring 2018

Instructor(s): Singh Kuldeep, MBA, PHD candidate

Office Number: COBA 506

Office Telephone Number: 817-272-3562

Email Address: ksingh@uta.edu

Office Hours: Monday – 12.00 PM – 1.00 PM and by appointment also.

Section Information (Course, section, time, classroom):
BSTAT 3321-007, 5.30PM – 6.50 PM, MW, COBA 142

Stat Lab: 136

Description of Course Content: Application of statistical techniques to business and economic data. Topics include descriptive statistics, probability distributions, estimation, inference, regression, correlation, and time series.

Student Learning Outcomes:

1. The student will be able to *evaluate verbal, numeric, and graphic descriptions of a data set.
2. The student will be able to select a simple random sample and to evaluate the role of randomness in data collection (both sampling and experimentation). The student will restrict causal inferences to data collected from experiments.
3. The student will be able to analyze probability problems by choosing and applying basic laws of probability, computing and interpreting results.
4. 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. The student will be able to analyze binomial and normal probabilities.
5. The student will be able to analyze scenarios appropriate for the Central Limit Theorem and choose the sampling distributions to find and interpret probabilities for the sample mean and sample proportion.

6. The student will be able to set up, calculate, 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.
7. The student will be able to set up and test hypotheses about a population mean and a population proportion and to interpret the results.
8. The student will be able to fit and interpret simple linear regression models along with the usual inferences.
9. The student will be able to use a software package in order to perform appropriate statistical analyses.
10. The student will be able to select and justify appropriate statistical techniques for a given scenario.

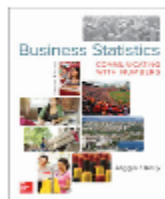
*For all topics, the student will be able to demonstrate knowledge and comprehension, for example by defining the new terms in the topic and describing and restating the concepts covered in each topic. The abilities to apply, analyze, synthesize and evaluate are assumed to be hierarchal. In other words, the ability to evaluate and synthesize presumes an ability to analyze and apply. Likewise the ability to analyze presumes an ability to apply.

The course grade reflects the proportion of topics that the student masters.

Required Textbooks and Other Course Materials:

1. **Business Statistics – Communication with Numbers, Jaggia/Kelly, Second Edition (ebook)**
You can purchase an E-Book which will come with access to the “Connect Software”. Connect will be used for on-line homework and quizzes (automatically graded and recorded). **YOU MUST PURCHASE THIS TEXT WITH CONNECT.....**

BSTAT 3321



Business Statistics: Communicating with Numbers

Jaggia, 2nd

• LearnSmart

2. **Connect Software (part of E-Book package) – YOU MUST HAVE CONNECT, OTHERWISE YOU MOST LIKELY WILL FAIL THIS COURSE. NO OTHER OPTIONS FOR COMPLETEING HOMEWORK AND QUIZES WILL BE AVAILABLE.**

Descriptions of major assignments and examinations

Learn Smart	5%
Home Work	15%
Quizzes	10%
First Midterm	20%
Second Midterm	25%
Final Exam	25%

Note 1: No late work past the specified deadline for that assignment will be accepted.

Note 2: No make-up Exam (you will receive a grade of 0 on that test)

Attendance: While attendance will not be used for your grade, you should be aware that "Connect" will capture the time you spend working homework and quizzes on-line.

Other Requirements: You MUST purchase the text used in this course along with the Connect software.

Grading: Your final grade will be based on the percentage weights above with averages 90-100 (A), 80-89.99 (B), 70-79.99 (C), 60-69.99 (D), and < 60 (F). Students are expected to keep track of their performance throughout the semester and seek guidance from available sources (including the instructor) if their performance drops below satisfactory levels; see "Student Support Services," below.

Make-up Exams: No make-up exams, homework, or major test will be allowed.

Class Schedule		
Date	Topics	Chapter
1/17/2018	Introduction	Chapter 1
1/22/2018	Tabular & Graphical Methods	Chapter 2
1/24/2018	Tabular & Graphical Methods	Chapter 2
1/29/2018	Numerical & Descriptive Measures	Chapter 3
1/31/2018	Numerical & Descriptive Measures	Chapter 3
2/5/2018	Introduction to Probability	Chapter 4
2/7/2018	Introduction to Probability	Chapter 4
2/12/2018	Introduction to Probability	Chapter 4
2/14/2018	First Midterm Exam Review	
2/19/2018	First Midterm	
2/21/2018	Discrete Probability Distributions	Chapter 5
2/26/2018	Discrete Probability Distributions	Chapter 5
2/28/2018	Continuous Probability Distributions	Chapter 6
3/5/2018	Continuous Probability Distributions	Chapter 6
3/7/2018	Continuous Probability Distributions	Chapter 6
3/12/2018	Spring Break	
3/14/2018	Spring Break	
3/19/2018	Sampling and Sampling Distributions	Chapter 7
3/21/2018	Sampling and Sampling Distributions	Chapter 7
3/26/2018	Interval Estimation	Chapter 8
3/28/2018	Interval Estimation	Chapter 8
4/2/2018	Interval Estimation	Chapter 8
4/4/2018	Exam Review	
4/9/2018	Second Midterm	
4/11/2018	Hypothesis Testing	Chapter 9
4/16/2018	Hypothesis Testing	Chapter 9
4/18/2018	Regression Analysis	Chapter 14
4/23/2018	Regression Analysis	Chapter 14
4/25/2018	Inference with Regression Models	Chapter 15
4/30/2018	Inference with Regression Models	Chapter 15
5/2/2018	Final Exam Review	
5/7/2018	Final Exam(5.30 PM - 8.00 PM)	

As the instructor for this course, I reserve the right to adjust this schedule in any way that serves the educational needs of the students enrolled in this course. –Singh Kuldeep.

Expectations for Out-of-Class Study: Beyond the time required to attend each class meeting, students enrolled in this course should expect to spend at least an additional 9 hours per week of their own time in course-related activities, including reading required materials, completing assignments, preparing for exams, completing various Connect assignments, etc.

Grade Grievances: Any appeal of a grade in this course must follow the procedures and deadlines for grade-related grievances as published in the current University Catalog. <http://catalog.uta.edu/academicregulations/grades/#undergraduatetext>; For student complaints, see <http://www.uta.edu/deanofstudents/student-complaints/index.php>.

Drop Policy:

Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. **Students will not be automatically dropped for non-attendance.** Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (<http://wweb.uta.edu/aao/fao/>).

Americans with Disabilities Act:

The University of Texas at Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including the *Americans with Disabilities Act (ADA)*. All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of that disability. Any student requiring an accommodation for this course must provide the instructor with official documentation in the form of a letter certified by the staff in the Office for Students with Disabilities, University Hall 102. Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability or by calling the Office for Students with Disabilities at (817) 272-3364.

Counseling and Psychological Services (CAPS) www.uta.edu/caps/ or calling 817-272-3671 is also available to all students to help increase their understanding of personal issues, address mental and behavioral health problems and make positive changes in their lives.

Non-Discrimination Policy: *The University of Texas at Arlington does not discriminate on the basis of race, color, national origin, religion, age, gender, sexual orientation, disabilities, genetic information, and/or veteran status in its educational programs or activities it operates. For more information, visit uta.edu/eos.*

Title IX Policy: The University of Texas at Arlington (“University”) is committed to maintaining a learning and working environment that is free from discrimination based on sex in accordance with Title IX of the Higher Education Amendments of 1972 (Title IX), which prohibits discrimination on the basis of sex in educational programs or activities; Title VII of the Civil Rights Act of 1964 (Title VII), which prohibits sex discrimination in employment; and the Campus Sexual Violence Elimination Act (SaVE Act). Sexual misconduct is a form of sex discrimination and will not be tolerated. *For information regarding Title IX, visit www.uta.edu/titleIX or contact Ms. Jean Hood, Vice President and Title IX Coordinator at (817) 272-7091 or jmhood@uta.edu.*

Academic Integrity:

Students enrolled in this course are expected to adhere to the UT Arlington Honor Code:

I pledge, on my honor, to uphold UT Arlington’s tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence.

I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.

UT Arlington faculty members may employ the Honor Code as they see fit in their courses, including (but not limited to) having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System *Regents’ Rule* 50101, §2.2, suspected violations of university’s standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student’s suspension or expulsion from the University.

Campus Carry: Effective August 1, 2016, the Campus Carry law (Senate Bill 11) allows those licensed individuals to carry a concealed handgun in buildings on public university campuses, except in locations the University establishes as prohibited. Under the new law, openly carrying handguns is not allowed on college campuses. For more information, visit <http://www.uta.edu/news/info/campus-carry/>

Student Support Services:

UT 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. Resources include [tutoring](#), [major-based learning centers](#), developmental education, [advising and mentoring](#), personal counseling, and [federally funded programs](#). For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to resources@uta.edu, or view the information at <http://www.uta.edu/universitycollege/resources/index.php>.

University Tutorial & Supplemental Instruction (Ransom Hall 205): UTSI offers a variety of academic support services for undergraduate students, including: 60 minute one-on-one [tutoring](#) sessions, [Start Strong](#) Freshman tutoring program, and [Supplemental Instruction](#). Office hours are Monday-Friday 8:00am-5:00pm. For more information visit www.uta.edu/utsi or call 817-272-2617.

The IDEAS Center (2nd Floor of Central Library) offers **FREE** tutoring to all students with a focus on transfer students, sophomores, veterans and others undergoing a transition to UT Arlington. Students can drop in, or check the schedule of available peer tutors at www.uta.edu/IDEAS, or call (817) 272-6593.

The English Writing Center (411LIBR): The Writing Center offers **FREE** tutoring in 15-, 30-, 45-, and 60-minute face-to-face and online sessions to all UTA students on any phase of their UTA coursework. Register and make appointments online at <https://uta.mywconline.com>. Classroom visits, workshops, and specialized services for graduate students and faculty are also available. Please see www.uta.edu/owl for detailed information on all our programs and services.

The Library's 2nd floor Academic Plaza offers students a central hub of support services, including IDEAS Center, University Advising Services, Transfer UTA and various college/school advising hours. Services are available during the library's hours of operation. <http://library.uta.edu/academic-plaza>

Electronic Communication:

UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at <http://www.uta.edu/oit/cs/email/mavmail.php>.

Student Feedback Survey:

At the end of each term, students enrolled in classes categorized as "lecture," "seminar," or "laboratory" shall be directed to complete an online Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student's feedback enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington's effort to solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit <http://www.uta.edu/sfs>.

Final Review Week:

A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week *unless specified in the class syllabus*. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

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.

Emergency Exit Procedures:

Should we experience an emergency event that requires us to vacate the building, students should exit the room and move toward the nearest exits, which are located on both ends of hallway. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist handicapped individuals.

Emergency Phone Numbers:In case of an on-campus emergency, call the UT Arlington Police Department at 817-272-3003 (non-campus phone), 2-3003 (campus phone). You may also dial 911. Non-emergency number 817-272-3381

RESOURCES FOR STUDENTS**Research or General Library Help**

Academic Plaza Consultation Services library.uta.edu/academic-plaza

Ask Us ask.uta.edu/

Library Tutorials library.uta.edu/how-to

Subject and Course Research Guides libguides.uta.edu

Librarians by Subject library.uta.edu/subject-librarians

Research Coaches <http://libguides.uta.edu/researchcoach>

Resources

A to Z List of Library Databases libguides.uta.edu/az.php

Course Reserves pulse.uta.edu/vwebv/enterCourseReserve.do

FabLab fablab.uta.edu/

Scholarly Communications (info about digital humanities, data management, data visualization, copyright, open educational resources, open access publishing, and more)
<http://library.uta.edu/scholcomm>

Special Collections library.uta.edu/special-collections
Study Room Reservations openroom.uta.edu/