Course Information PROBABILITY AND STATISTICS FOR MANAGEMENT AND ECONOMICS SUMMER 2016 STAT 3360

Section	Call No	Course Meeting Times	Class Room	Instructor			
3360.5U1	52060	M W 5:30 PM – 7:45 PM	<u>MC 2.410</u>	Koshevnik			
Professor Contact Infor Phone:972-8 Hours: Teaching As	383-4178	Dr. Yuly Koshevnik Office: FA 2.408 Email: yuly.koshevnik@utdallas.edu M / T / W / TH – 3:30 – 5:00 PM Azar Ghahari					
Course Pre-requisites, Co-requisites, and/or Other Restrictions							

MATH 1326

Course Description – Probability theory including independence, conditioning, density functions, frequently used families of distributions, random variables, expectation, moments, and the central limit theorem; statistical inference including sampling, estimation, hypothesis testing, and regression.

Student Learning Objectives/Outcomes

- Students will be able to use Statistical Data Analysis, its tools and techniques.
- Coverage will be provided for basics in Probability Theory (independence and conditional distributions, probability rules, continuous distributions and density functions, random variables, their expectations and moments).
- Students will familiarize themselves with sampling distributions of various statistics and learn how to draw and apply statistical inferences based on sampling distributions.
- Statistical Inferences (such as hypothesis testing and confidence intervals) will be extensively covered during the course.

Required Textbooks and Materials

Statistics for Management and Economics (by Gerald Keller) Abbreviated 10th (or 9th) Edition ISBN 10: 1-285-42545-6 / ISBN: 9780324594270

Textbook, lecture notes, calculator, and scratch paper should be brought to each class period. Students will be working problems in class.

IMPORTANT DATES &	t Holidays
CLASSES START	MONDAY, MAY 23
MEMORIAL DAY	MONDAY, MAY 30
CENSUS DAY/ DROP WITHOUT A "W"	THURSDAY, JUNE 2
EXAM 1	JUNE 15
DROP WITH WL	JUNE 17 – JULY 11
INDEPENDENCE DAY	JULY 4
Exam 2	JULY 18
LAST DAY OF CLASSES	Monday, August 8
FINAL EXAM	MONDAY, AUGUST 8

Complete syllabus can be seen online - from http://coursebook.utdallas.edu/

Grading Policy

Your course grade will be determined based on the following weighting:

Homework Assignments (collected in class only)

Quizzes (conducted in class only)

Two Intermediate Exams

10% (two lowest scores dropped) **10%** (two lowest scores dropped)

25% + 25% = 50%

20% + 20% = 50 30%

Final Exam (in the same classroom, see schedule)

Make-up exams will only be permitted for students who demonstrate valid reasons to miss the scheduled exam.

No on-line homework submission and no make-up quiz.

Grading Scale:												
[97, 100]	[93, 97)	[90, 93)	[87, 90)	[83, 87)	[80, 83)	[77, 80)	[73, 77)	[70, 73)	[67, 70)	[63, 67)	[60, 63)	[0, 60)
A+	Α	Α-	B+	В	В-	C+	С	C -	D+	D	D -	F

TENTATIVE COURSE OUTLINE				
Days	Topics	Sections		
May 23	Introduction: Grading Policy, Rights and Duties	2.1 – 2.3		
May 23 – 25	Graphical and Tabular Descriptive Techniques	3.1 – 3.3		
May 25 – June 1	Numerical Summaries	4.1 – 4.4		
June 6 – 8	Probability Rules/ Distributions	6.1 – 6.3		
June 8 – 13	Discrete Variables and Distributions	7.1 – 7.5		
June 13	First Exam Review	Chapters 2 - 4, 6 - 7		
June 15	Exam I			
June 20 – 22	Continuous Models and Sampling Distributions	8.2, 9.1 – 9.2		
June 22 – 27	Estimation and Confidence Intervals	10.1 – 10.2		
July 6 – 11	Hypothesis Testing and Z test	11.1 – 11.2		
July 11 – 13	Inferences about a Population	12.1 – 12.3		
July 13	Second Exam Review	Chapters		
July 18	Exam II	7 – 13		
July 20	Comparing Population Means: Matched Pairs	13.3		
July 20 – 25	Comparing Population Proportions	13.5		
July 25 – 27	Comparing Two Population Means	13.1		
July 27 – August 1	Nominal Variables/ Chi-Squared Tests	15.1 – 15.2		
August 1 – August 3	Simple Linear Regression – Basics	16.1, 16.2, 16.4		
August 3	Course Overview and Final Review	All Sections		
August 8	Final Exam	Above		

Course & Instructor Policies

Announcements:	HW and Quiz days will be announced in class and via E-Learning.
Homework:	Homework will be assigned, collected in class, graded, and returned in
	class. No online submission, please! There will be 8 homework
	assignments posted on E-Learning and expected to be turned in for
	grading (IN CLASS ONLY!) The lowest homework score will be dropped
	and the rest will be scaled to 100%.
	VERY IMPORTANT: Work can be submitted in a blue book (available at
	the bookstore, somewhere in the student union, or off campus book
	store). Student FIRST and LAST NAME (printed and complete) should
	be clearly written AT THE TOP of the cover page.
`	Work is to be complete, written with proper mathematical notation, and
	logical flow. Each problem is to be written on one side of a page.
	Homework will not be accepted after the lecture is over, no exceptions.
	Papers that have not been picked up by the date of the last exam will be
	destroyed at the end of semester.
Quizzes:	There will be tentatively 8 quizzes. The lowest quiz score will be dropped
	and the rest will be scaled to 100%.
Exams:	Two major common exams and a comprehensive mandatory final will
	be given. Dates, time, and room are shown in the schedule.
Calculator:	A scientific calculator and Tables 2 – 5 from the book are required.
	All electronic devices are NOT permitted in class or during exams.

Technical Support

If you experience any problems with your UTD account you may send an email to: <u>assist@utdallas.edu</u> or call the UTD Computer Helpdesk at 972-883-2911.

Field Trip Policies, Off-campus Instruction and Course Activities

Off-campus, out-of-state, and foreign instruction and activities are subject to state law and University policies and procedures regarding travel and risk-related activities. Information regarding these rules and regulations may be found at the website address <u>http://www.utdallas.edu/BusinessAffairs/Travel_Risk_Activities.htm</u>. Additional information is available from the office of the school dean. Below is a description of any travel and/or risk-related activity associated with this course.

Student Conduct & Discipline

The University of Texas System and The University of Texas at Dallas have rules and regulations for the orderly and efficient conduct of their business. It is the responsibility of each student and each student organization to be knowledgeable about the rules and regulations which govern student conduct and activities. General information on student conduct and discipline is contained in the UTD printed publication, *A to Z Guide*, which is provided to all registered students each academic year.

The University of Texas at Dallas administers student discipline within the procedures of recognized and established due process. Procedures are defined and described in the *Rules and Regulations, Series 50000, Board of Regents, The University of Texas System,* and in Title V, Rules on Student Services and Activities of the university's *Handbook of Operating Procedures*. Copies of these rules and regulations are available to students in the Office of the Dean of Students, where staff members are available to assist students in interpreting the rules and regulations (SU 1.602, 972/883-6391) and online at http://www.utdallas.edu/iudicialaffairs/UTDJudicialAffairs-HOPV.html

A student at the university neither loses the rights nor escapes the responsibilities of citizenship. He or she is expected to obey federal, state, and local laws as well as the Regents' Rules, university regulations, and administrative rules. Students are subject to discipline for violating the standards of conduct whether such conduct takes place on or off campus, or whether civil or criminal penalties are also imposed for such conduct.

Academic Integrity

The faculty expects from its students a high level of responsibility and academic honesty. Because the value of an academic degree depends upon the absolute integrity of the work done by the student for that degree, it is imperative that a student demonstrate a high standard of individual honor in his or her scholastic work.

Scholastic Dishonesty, any student who commits an act of scholastic dishonesty is subject to discipline. 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.

Plagiarism, especially from the web, from portions of papers for other classes, and from any other source is unacceptable and will be dealt with under the university's policy on plagiarism (see general catalog for details). This course will use the resources of turnitin.com, which searches the web for possible plagiarism and is over 90% effective.

Copyright Notice

The copyright law of the United States (Title 17, United States Code) governs the making of photocopies or other reproductions of copyrighted materials, including music and software. Copying, displaying, reproducing, or distributing copyrighted works may infringe the copyright owner's rights and such infringement is subject to appropriate disciplinary action as well as criminal penalties provided by federal law. Usage of such material is only appropriate when that usage constitutes "fair use" under the Copyright Act. As a UT Dallas student, you are required to follow the institution's copyright policy (Policy Memorandum 84-I.3-46). For more information about the fair use exemption, see

http://www.utsystem.edu/ogc/intellectualproperty/copypol2.htm

Email Use

The University of Texas at Dallas recognizes the value and efficiency of communication between faculty/staff and students through electronic mail. At the same time, email raises some issues concerning security and the identity of each individual in an email exchange. The university encourages all official student email correspondence be sent only to a student's U.T. Dallas email address and that faculty and staff consider email from students official only if it originates from a UTD student account. This allows the university to maintain a high degree of confidence in the identity of all individual corresponding and the security of the transmitted information. UTD furnishes each student with a free email account that is to be used in all communication with university personnel. The Department of Information Resources at U.T. Dallas provides a method for students to have their U.T. Dallas mail forwarded to other accounts.

Withdrawal from Class

The administration of this institution has set deadlines for withdrawal of any college-level courses. These dates and times are published in that semester's course catalog. Administration procedures must be followed. It is the student's responsibility to handle withdrawal requirements from any class. In other words, I cannot drop or withdraw any student. You must do the proper paperwork to ensure that you will not receive a final grade of "F" in a course if you choose not to attend the class once you are enrolled.

Student Grievance Procedures

Procedures for student grievances are found in Title V, Rules on Student Services and Activities, of the university's *Handbook of Operating Procedures*.

In attempting to resolve any student grievance regarding grades, evaluations, or other fulfillments of academic responsibility, it is the obligation of the student first to make a serious effort to resolve the matter with the instructor, supervisor, administrator, or committee with whom the grievance originates (hereafter called "the respondent"). Individual faculty members retain primary responsibility for assigning grades and evaluations. If the matter cannot be resolved at that level, the grievance must be submitted in writing to the respondent with a copy of the respondent's School Dean. If the matter is not resolved by the written response provided by the respondent, the student may submit a written appeal to the School Dean. If the grievance is not resolved by the School Dean's decision, the student may make a written appeal to the Dean of Graduate or Undergraduate Education, and the deal will appoint and convene an Academic Appeals Panel. The decision of the Academic Appeals Panel is final. The results of the academic appeals process will be distributed to all involved parties.

Copies of these rules and regulations are available to students in the Office of the Dean of Students, where staff members are available to assist students in interpreting the rules and regulations.

Incomplete Grade Policy

As per university policy, incomplete grades will be granted only for work unavoidably missed at the semester's end and only if 70% of the course work has been completed. An incomplete grade must be resolved within eight (8) weeks from the first day of the subsequent long semester. If the required work to complete the course and to remove the incomplete grade is not submitted by the specified deadline, the incomplete grade is changed automatically to a grade of \underline{F} .

Disability Services

The goal of Disability Services is to provide students with disabilities educational opportunities equal to those of their non-disabled peers. Disability Services is located in room 1.610 in the Student Union. Office hours are Monday and Thursday, 8:30 a.m. to 6:30 p.m.; Tuesday and Wednesday, 8:30 a.m. to 7:30 p.m.; and Friday, 8:30 a.m. to 5:30 p.m.

The contact information for the Office of Disability Services is: The University of Texas at Dallas, SU 22 PO Box 830688 Richardson, Texas 75083-0688 (972) 883-2098 (voice or TTY) disabilityservice@utdallas.edu

If you anticipate issues related to the format or requirements of this course, please meet with the Coordinator of Disability Services. The Coordinator is available to discuss ways to ensure your full participation in the course. If you determine that formal, disability-related accommodations are necessary, it is very important that you be registered with Disability Services to notify them of your eligibility for reasonable accommodations. Disability Services can then plan how best to coordinate your accommodations.

It is the student's responsibility to notify his or her professors of the need for such an accommodation. Disability Services provides students with letters to present to faculty members to verify that the student has a disability and needs accommodations. Individuals requiring special accommodation should contact the professor after class or during office hours.

Religious Holy Days

The University of Texas at Dallas will excuse a student from class or other required activities for the travel to and observance of a religious holy day for a religion whose places of worship are exempt from property tax under Section 11.20, Tax Code, Texas Code Annotated.

The student is encouraged to notify the instructor or activity sponsor as soon as possible regarding the absence, preferably in advance of the assignment. The student, so excused, will be allowed to take the exam or complete the assignment within a reasonable time after the absence: a period equal to the length of the absence, up to a maximum of one week. A student who notifies the instructor and completes any missed exam or assignment may not be penalized for the absence. A student who fails to complete the exam or assignment within the prescribed period may receive a failing grade for that exam or assignment.

If a student or an instructor disagrees about the nature of the absence [i.e., for the purpose of observing a religious holy day] or if there is similar disagreement about whether the student has been given a reasonable time to complete any missed assignments or examinations, either the student or the instructor may request a ruling from the chief executive officer of the institution, or his or her designee. The chief executive officer or designee must take into account the legislative intent of TEC 51.911(b), and the student and instructor will abide by the decision of the chief executive officer or designee.

These descriptions and timelines are subject to change at the discretion of the Professor.