ECO 578.81E
Statistical Methods
Spring 2017

Instructor: Dr. Lirong Liu
Class meetings: Wednesdays 6:15-8:55 PM at UCD
Office Location: TBA
Office Hours: By appointment
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- The best way to contact me is by email. Please put the course number 'ECO 578' in the subject. Missing course number in the subject can seriously delay the response time.
- You are expected to attend classes on a regular basis. Formal documents are needed for any makeup classes and late submissions.
- Please consult your syllabus and the course page in eCollege to see if your questions/concerns are addressed before sending me an email.
- If you miss class, consult the course schedule on the last page of the syllabus for materials covered on each class day. It is your responsibility to review the materials to catch up.

COURSE INFORMATION

Textbook(s) Required:

Statistics for Business and Economics   James T. McClave, P. George Benson, Terry T Sincich, 12th edition ISBN 9781111826925

Course Description

A course dealing with statistical concepts including measures of central tendency and dispersion, probability distributions, the Central Limit Theorem, Sampling, Estimation, Hypothesis testing, Analysis of Variance, Correlation and Regression analysis, and Multiple Regression.

Course Objectives

The objective of this course is to provide an understanding for the graduate business student on statistical concepts to include measurements of location and dispersion, probability, probability distributions, sampling, estimation, hypothesis testing, regression, and correlation analysis, and multiple regression. By completing this course the student will learn to perform the following:

1) Calculate and apply measures of location and measures of dispersion -- grouped and ungrouped data cases.

2) Apply discrete and continuous probability distributions to various business problems.

3) Perform Test of Hypothesis as well as calculate confidence interval for a population parameter for single sample and two sample cases. Understand the concept of p-values.

4) Apply non-parametric test such as the Chi-Square test for Independence as well as Goodness of Fit.

5) Compute and interpret the results of Bivariate and Multivariate Regression and Correlation Analysis and also perform ANOVA and F-test. Further, understand both the meaning and applicability of a dummy variable and the assumptions which underline a regression model. Be able to perform a multiple regression using computer software.

GRADING

Course grading is based on the following assignments:
   (a)   Four homework assignments (40% of total grade)
   (b)   Midterm Exam (30%)
   (c)   Final Exam (30%)

Late submission will be accepted with valid documentation and at the discretion of the instructor. A 10% penalty will be imposed for each of the days that the submission is late. No makeup assignment/class will be allowed for missing classes due to illness unless a doctor's note is provided.

Final grades in this course will be based on the following scale:

A = 90%-100%   B = 80%-89%   C = 70%-79%
D = 60%-69%   F = 59% or Below

ACCESS AND NAVIGATION

Pearson LearningStudio (eCollege) Access and Log in Information

This course will be facilitated using Pearson LearningStudio, the learning management system used by Texas A&M University-Commerce. To get started with the course, go to myLeo.   http://www.tamuc.edu/myleo.aspx

You will need your CWID and password to log in to the course. If you do not know your CWID or have forgotten your password, contact Technology Services at 903.468.6000 or helpdesk@tamuc.edu.

myLeo Support

Your myLeo email address is required to send and receive all student correspondence. Please email helpdesk@tamuc.edu or call us at 903-468-6000 with any questions about setting up your myLeo email account. You may also access information at myLeo. https://leo.tamuc.edu

COMMUNICATION AND SUPPORT

Interaction with Instructor Statement

- The best way to contact me outside the classroom is by email or come by my office during office hours. I will reply emails as promptly as I could. Please put the course number 'ECO 595.81E' in the subject. Missing course number in the subject can seriously delay the response time.
- Please allow up to 24 hours during weekdays and 48 hours during weekend for me to reply. If you do not hear from me within that time frame, you can resend your email or call me at 903-886-5674 (leave a message if not answered).

COURSE AND UNIVERSITY PROCEDURES/POLICIES

Syllabus Change Policy

The syllabus is a guide. Circumstances and events, such as student progress, may make it necessary for the instructor to modify the syllabus during the semester. Any changes made to the syllabus will be announced in advance in Webinar or through email.

University Specific Procedures
Student Conduct
All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment. (See current Student Guidebook*).*

Students should also consult the Rules of Netiquette for more information regarding how to interact with students in an online forum: Netiquette
http://www.albion.com/netiquette/corerules.html

ADA Statement
Students with Disabilities
The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you have a disability requiring an accommodation, please contact:
Office of Student Disability Resources and Services
Texas A&M University-Commerce
Gee Library- Room 132
Phone (903) 886-5150 or (903) 886-5835
Fax (903) 468-8148
Email: Rebecca.Tuerk@tamuc.edu

Website: Office of Student Disability Resources and Services
http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/

Nondiscrimination Notice
Texas A&M University-Commerce will comply in the classroom, and in online courses, with all federal and state laws prohibiting discrimination and related retaliation on the basis of race, color, religion, sex, national origin, disability, age, genetic information or veteran status. Further, an environment free from discrimination on the basis of sexual orientation, gender identity, or gender expression will be maintained.

Campus Concealed Carry
Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in Texas A&M University-Commerce buildings only by

persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and A&M-Commerce Rule 34.06.02.R1, license holders may not carry a concealed handgun in restricted locations. For a list of locations, please refer to ((http://www.tamuc.edu/aboutUs/policiesProceduresStandardsStatements/rulesProcedures/34SafetyOfEmployeesAndStudents/34.06.02.R1.pdf) and/or consult your event organizer). Pursuant to PC 46.035, the open carrying of handguns is prohibited on all A&M-Commerce campuses. Report violations to the University Police Department at 903-886-5868 or 9-1-1.

Tentative Schedule

Week	Text	Assignments
Week 1 (1/17-1/22)	Chapter 1 Statistics, Data, & Statistical Thinking	
Week 2 (1/23-1/29)	Chapters 2 Methods for Describing Sets of Data	
Week 3 (1/30-2/5)	Chapter 3 Probability	
Week 4 (2/6-2/12)	Chapters 4 Random Variables & Probability Distributions	Homework 1
Week 5 (2/13-2/19)	Chapters 5 Sampling Distributions	
Week 6 (2/20-2/26)	Chapter 6 Inferences Based on a Single Sample: Confidence Interval	
Week 7 (2/27-3/5)	Chapter 7 Inferences Based on a Single Sample: Tests of Hypotheses	Homework 2
Week 8 (3/6-3/12)	Midterm Exam	
Week 9 (3/20-3/16)	Chapter 8 Inferences Based on Two Samples	
Week 10 (3/27-4/2)	Chapter 9 Design of Experiments and Analysis of Variance	
Week 11 (4/3-4/9)	Chapter 10 Categorical Data Analysis	Homework 3
Week 12 (4/10-4/16)	Chapter 11 Simple Linear Regression	
Week 13 (4/17-4/23)	Chapter 12 Multiple Regression and Model Building	
Week 14 (4/24-4/30)	Chapter 12 Multiple Regression and Model Building	Homework 4
Week 15 (5/1-5/7)	TBA	
Final Week (5/8-5/12)	Final Exam	

Note: all assignments are due by 6:00 PM on the Wednesday of the week