



ECO 578.05W

Statistical Methods

Spring 2018

Instructor: Dr. Lirong Liu

Office Phone: 903-886-5681

Office Hours: by appointment

Email: Lirong.Liu@tamuc.edu

- 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.
- Please consult your syllabus and the course page in eCollege to see if your questions/concerns are addressed before sending me an email. 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.
- You are responsible for joining online class sessions regularly as long as time permits and checking your university email daily. If you cannot attend the live lecture, you should review the recordings as soon as possible. Continuously failing to keep up with the announcements and updates included in emails or lectures can be a sign of lack of class participation.
- We use YouSeeU to hold live lectures. To attend the live lecture, locate and click YouSeeU on the left panel of the course page on ecollege. You need to accept the invitation to attend the lectures. Note that the platform is open 30 minutes before the schedule time.
- Course schedule at the end of the syllabus is temporary and subject to changes. Announcements, updates and other information will be released either during live lecture or via email.

COURSE INFORMATION

Textbook(s) Required:

Statistics for Business and Economics James T. McClave, P. George Benson, Terry T Sincich, 12th edition ISBN 9780321826237

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) Perform ANOVA analysis.
- 5) Compute and interpret the results of Bivariate and Multivariate Regression and Correlation Analysis and also perform 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) Homework assignments (45%): grade on completion.
- (b) Exam I (20%)
- (c) Exam II (15%)

- (d) Data Analysis Project (15%): see guideline for details
- (e) Class participation and discussion (5%)
- (f) Academic Honesty Policy: every one needs to sign and upload the policy, to the corresponding Dropbox folder before any assignment can be graded. Those who fail to comply by the end of the semester will receive “Incomplete” for the course grade.

For homework assignment and exams, you can either type up the answers or write them down manually, or a combination of both—type up the words and write down the formulas/calculations manually.

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. Extension for an assignment will be given with valid documentation. Extensions are at the discretion of the instructor. Extensions may include a late penalty. Documentations submitted after the grade being posted will NOT be considered.

All assignment must be formally submitted to the dropbox. If you have difficulty accessing the ecollege temporarily, you can email me your assignment as a proof of on-time submission. However, you still need to upload it to the dropbox as soon the issue is resolved. All files submitted must have the following file name: lastname_firstname_type of assignment. Failure to do so will result in penalty in grading.

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). <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 578E' 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 (2/1-2/2)	Chapter 1 Statistics, Data, & Statistical Thinking	Academic Honesty Policy
Week 2 (2/5-2/9)	Chapters 2 Methods for Describing Sets of Data	
Week 3 (2/12-2/16)	Chapter 3 Probability	
Week 4 (2/19-2/23)	Chapters 4 Random Variables & Probability Distributions	Homework 1
Week 5 (2/26-3/2)	Chapters 5 Sampling Distributions	
Week 6 (3/5-3/9)	Chapter 7 Inferences Based on a Single Sample: Tests of Hypotheses	Homework 2
Week 7 (3/12-3/16)	Spring Break	
Week 8 (3/19-3/23)	Exam I: available 3/23-3/25	Exam I
Week 9 (3/26-3/30)	Chapter 11 Simple Linear Regression	
Week 10 (4/2-4/6)	Chapter 12 Multiple Regression and Model Building	Homework 3
Week 11 (4/9-4/13)	Q&A session on Project	
Week 12 (4/16-4/20)	Chapter 6 Inferences Based on a Single Sample: Confidence Interval	Project due
Week 13 (4/23-4/27)	Chapter 8 Inferences Based on Two Samples	
Week 14 (4/30-5/4)	Chapter 9 Design of Experiments and Analysis of Variance	Homework 4 practice only
Final Week (5/7-5/11)	Exam II: available 5/4-5/7	Exam II

Note: 1. We will have live lectures in weeks highlighted in bold.

2. All assignments are due by the end of the weekend, Sunday at 11:59 PM, except for **Exam II, which is due on Monday 5/7 at 11:59 PM.**