

Economics 502
Quantitative Analysis for Management
Summer I 2020

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YouSeeU: First meeting: Wednesday, June 1st at 6:30pm

Text: D. A. Lind/W. G. Marchal/S. A. Wathen, Statistical Techniques in Business & Economics – McGraw Hill Irwin, 17e Year: 2018, ISBN: 9781259666360 (978-1-259-66636-0).

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, correlation and regression analysis.

Course Prerequisites: Lvl U MATH 176 Min Grade C or Lvl U MATH 1325 Min Grade C)

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

- 1) Calculate, apply, and interpret the measures of location and measures of dispersion.
- 2) Understand the probability distributions and apply discrete and continuous probability distributions to various business problems.
- 3) Understand the importance of CLT and its implications.
- 4) Understand the concepts of inference and its importance in decision making. Understand null and alternative hypotheses, and type I and type II errors, and perform test of hypotheses.
- 5) Calculate confidence interval for a population parameter for a single mean, including use of the “t” and the “Z” tests.
- 6) Compute and interpret the results of Bivariate and Multivariate Regression and Correlation Analysis.

TENTATIVE COURSE OUTLINE*

UNIT 1:	What is Statistics	Chs. 1 & 2
	Describing Data	(no quiz)
	Describing Data: Numerical Measures	Ch.3 Quiz
UNIT 2:	Describing Data: Displaying & Exploring Data	Ch. 4 Quiz
	Probability	
	Saturday 6/6 – Sunday 6/7	
	Discussion 1 due	
	Discrete Probability Distributions	
UNIT 3:	Saturday 6/13 – Sunday 6/14	Ch. 6 Quiz
	Continuous Probability Distributions	Ch. 7 Quiz
	Saturday 6/13 – Sunday 6/14	
UNIT 4:	Sampling Methods & the Central Limit Theorem	Ch. 8 Quiz
	Discussion 2 due	
	Saturday 6/20 – Sunday 6/21	
UNIT 5:	Estimation & Confidence Intervals	Ch. 9 quiz
	Saturday 6/20 – Sunday 6/21	
	One-Sample Test of Hypothesis	Ch.10 Quiz
	Discussion 3 due	
UNIT 6:	Two-Sample Test of Hypothesis	Ch. 11 Quiz
	Saturday 6/27 – Sunday 6/28	
	ANOVA	Ch. 12 Quiz
UNIT 7:	Linear Regression & Correlation	Ch. 13 Quiz
	Saturday 6/27 – Sunday 6/28	
	Multiple Regression	Ch. 14 (no Quiz)
	Chi Square Applications	Ch. 15 Quiz
	Discussion 4 due	
	Saturday 6/27 – Sunday 6/28	
UNIT 8	Final Exam	Final Exam
	Discussion 5 due	
	(comprehensive) – Wednesday 7/1 – Thursday 7/2	

* This outline is subject to change! Regular YouSeeU attendance ([archived](#) or [recorded](#)) is required to follow up with these changes, discussions, and the additional assignments.

GRADES AND ADMINISTRATIVE MATTERS:

Exams: There will be a final exam and 11 quizzes (you will be able to drop 1 of the 11). Dates for quizzes are highlighted in yellow. You will be taking these quizzes and test online; you should get familiar with the D2L system as soon as possible. Each quiz and exam will open for a 48-hour window. There will be no make-up quizzes/exams if the deadline is missed. If you had a legitimate excuse to miss a quiz, the credit will go to your final, otherwise, I will drop the missed quiz.

Grading: The grades will be based on final exam (40 points), 10 quizzes (5 points each), 5 discussions (10 points total). The grading scale is

90 – 100	A
80 – 89	B
70 – 79	C
60 – 69	D
Below 50	F

HELPFUL HINTS

SINCE this is an online course, you need to follow your school emails very regularly. You will have regular announcements and uploads. Reading the assigned materials, listening to Class Live sessions, working the assigned exercises, being in constant communication with your instructor, checking the class website regularly are very important learning tools.

YouSeeU: Live attendance is strongly encouraged but is not required. However, listening to the archived lectures is a course requirement. In case you miss a session, please listen to the archived recordings and contact me for further explanations or questions via the email. To be able to use the chat platform for D2L, you will need a head-set with earphones and a microphone. For more detailed instructions as to how to use YouSeeU, please check out the information on the landing page of D2L under student resources.

RULES, REGULATIONS AND OTHER STUFF

- ✓ All students enrolled at the university shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment.
- ✓ 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 @ Gee Library- Room 162, Phone (903) 886-5150 or (903) 886-5835, Fax (903) 468-8148. Email: studentdisabilityservices@tamuc.edu.
Website: <http://www.tamuc.edu/campusLife/campusServices/studentDisabilityResourcesAndServices/>
- ✓ Plagiarism represents disregard for academic standards and is strictly against University policy. Plagiarized work will result in an “F” for the course and further administrative sanctions permitted under University policy. Guidelines for properly quoting

someone else's writings and the proper citing of sources can be found in the APA Publication Manual. If you do not understand the term "plagiarism", or if you have difficulty summarizing or documenting sources, contact your professor for assistance. The College of Business and Technology at Texas A&M University-Commerce students will follow the highest level of ethical and professional behavior. Actionable Conduct includes illegal activity, dishonest conduct, cheating, and plagiarism. Failure to abide by the principles of ethical and professional behavior will result in sanctions up to and including dismissal from the university.

✓ A&M-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.

✓ 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 Texas 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 A&MCommerce Rule 34.06.02.R1 and/or consult your event organizer. Pursuant to PC 46.035, the open carry 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.