



Dillard College of Business Administration

Syllabus:

**Intro to Econometrics - 30374 - ECON 3543 Section X30
Summer I Session, 2020**

Classes will be held online from June 1 to July 2

CONTACT INFORMATION:

INSTRUCTOR: Dr. John E. Martinez
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OFFICE HOURS: Due to online nature of course, no office hours are posted.

COURSE MATERIALS:

Required Text:

Gujarati, Damodar; Essentials of Econometrics, Third edition
ISBN 978-0-07-297092-0, Publisher: Mcgraw-Hill Irwin, Publication date: 2006

The text is designed to help students fully understand regression analysis, its components, and its uses. Taking into consideration current statistical technology, it focuses on the use and interpretation of software, while also demonstrating the logic, reasoning, and calculations that lie behind any statistical analysis. Furthermore, the text emphasizes the application of regression tools to real-life business concerns. This multilayered, yet pragmatic approach fully equips students to derive the benefit and meaning of a regression analysis.

Other Required Materials:

Students are required to have a video webcam. Respondus will be used for monitoring purposes.

COURSE DESCRIPTION:

The application of statistical methods to economic and financial analysis; particular attention is given to the regression analysis including limited and dichotomous dependent variables, regression diagnostics, hypothesis testing, analysis of variance, and selected topics in time series forecasting.

COURSE PREREQUISITE:

Junior standing or above or consent of the chair, and BUAD 3033 or equivalent.

OBJECTIVES:

LEARNING GOALS:

General Learning Goals:

Upon successful completion of this course, the student should:

Demonstrate problem-solving and decision-making abilities through the critical analysis, evaluation, and interpretation of business information. Demonstrate a competency in speaking and writing for common business scenarios. Know how to use team building and collaboration to achieve group objectives. Be able to utilize available technology for common business applications.

Course Specific Learning Goals:

Understand basic ordinary least squares (OLS) regression and its application in economic research. Grasp the assumptions under which OLS regression analysis is developed and understand the reasons for these assumptions. Develop an understanding of the classical regression model and understand issues that arise when its fundamental assumptions are violated. Demonstrate ability to read and interpret articles in which regression analysis is employed and identify specific items that validate (or invalidate) the model(s) and application(s). Understand extended applications of basic OLS regression analyses in selected, specialized econometric models. Develop an appreciation for limitations that accompany OLS regression analysis and be able to identify instances in which application exceed common sense limitations.

Other Requirements:

Each student should have a calculator capable of calculating standard deviations and is expected to be familiar with the calculator's functions. Each student should have a thumb drive (USB) on which to keep various data sets and assignments that will be a part of each class. Projects and other selected assignments will include the requirement that electronic versions of your work be submitted. Maintaining these items on an accessible storage device will reduce stress that may otherwise develop with respect to submissions.

Assessment:

Attainment of learning goals will be assessed by a combination of class discussions, problems and exercises in class, quizzes, and exams. Exercises and exams will assess student problem solving and decision making abilities as demonstrated by critical analysis, evaluation, and interpretation of business and economic information.

COURSE POLICIES:

A. Attendance Policy:

There are no mandatory in-class sessions for this course. There will be face-to-face testing options that will minimize expenses for you. Please let me know early in the course if you cannot make these face-to-face testing options. You are expected to log into D2L a minimum of once weekly to check for updates and announcements via postings and email. See the university catalog for the University Class Attendance Policy.

B. Other Related Policies

Contact Procedures: Sending messages either through my email or through D2L is the easiest asynchronous method of contacting me with a substantial issue. I respond to your emails within 48 hours (usually much faster). Text messages to my cell phone work well for quick issues. Calling me by cell is for pressing matters only.

Course Time: Deadlines indicated in the syllabus/D2L are for Central Daylight Time. If you are completing coursework in another time zone, please note the time difference and plan accordingly.

Missed Examination Policy: Not applicable. You are responsible for managing your schedule to complete the quizzes by the posted time / date. If an emergency arises (e.g. serious injury, serious illness or death in your immediate family) contact me ASAP for different test arrangements.

GRADING and EVALUATIONS:

A student's grade will be based on one of the following:

Major Exams	60%	600 Points
Final Exam	40%	400 Points

GRADE EVALUATION: As a percent of total points:

A (Above 90), B (80-89), C (70-79), D (60-69), F (below 60)

Total Points:

Option 1: [Avg. Exam Score X 6.0] + [Final Exam Score X 4.0] + [Bonus Pts.]

Major exams:

Two major exams will be given. Each exam is equally weighted and will involve calculation and derivation of answers as well as their interpretation and meaning. Questions will come from the test and notes. Failure to take an exam on the scheduled date without prior approval will result either in an 'F' or 'I' (Incomplete) for the course. Exams are scheduled two times a day for 2 hours each with a specified time limit of one hour. Students have the option as to the time, but are limited to one attempt only. Additional attempts constitute cheating and will be severely punished.

Final exam:

A final exam will be given, but only over the last section of the class. The final is scheduled two times a day for 2 hours each with a specified time limit of one hour. Students have the option as to the time, but are limited to one attempt only. Additional attempts constitute cheating and will be severely punished.

Missed Final Exam Policy:

No makeup exams are given. If, because of a truly unavoidable situation, you are absolutely not able to take the final exam at the scheduled time/date, it is **your responsibility** to talk to me well in advance to ask to take the exam early. If a real, legitimate, last minute

emergency occurs, it is **your responsibility** to contact me before the exam begins. If I am not available in my office, you must leave a voice mail or e-mail **before the exam begins**. Provided there is a legitimate reason for missing the last exam, a student will receive a grade of 'I' for the course. If a student has a legitimate reason for missing either Exam 1 or Exam 2, the average on the other two exams will replace the missing exam score.

Class Participation:

Students are expected to participate in all class discussions.

Bonus Points:

Students may earn bonus points on quizzes (see example above) and any number or other instructor approved activities.

Campus Carry:

Senate Bill 11 passed by the 84th Texas Legislature allows licensed handgun holders to carry concealed handguns on campus, effective August 1, 2016. Areas excluded from concealed carry are appropriately marked, in accordance with state law. For more information regarding campus carry, please refer to the University's webpage at [Campus Carry Policies Link](#).

Academic Integrity:

With regard to academic honesty, students are referred to the "Student Honor Creed" of **Midwestern State University Undergraduate Catalog**.

Americans with Disabilities Act:

This class follows the guidelines suggested by the Center for Counseling and Disabilities Services for those students who qualify for disability services. **See Midwestern State University Undergraduate Catalog**.

D2L:

The Midwestern State University D2L program will be incorporated into this class and will provide the primary default means of communication. Grades will be posted using D2L. **Each student is expected to master the use of the university website, D2L.** Assistance to achieve comfort using this program will be available as needed.

Syllabus Change Policy:

This syllabus is a guide for the course and is subject to change. All changes will be announced in class and students will be responsible for incorporating the changes into the syllabus. This syllabus is a guide for the course—not a "contract"—and is subject to change. Syllabus changes will be communicated via D2L.

OTHER RELEVANT INFORMATION:

Midwestern State University Student Handbook:

See the most recent MSU Student Handbook for a statement of the university's policy on academic dishonesty. Any other questions not specifically addressed by this syllabus are governed by the student handbook. Make sure you have a copy and are familiar with all the procedures therein. Pay close attention to the Code of Student Conduct section.

Medical or Other Serious Problems:

Please take time and make the effort to advise me if you have difficulties that require my attention to properly evaluate your classroom participation and activities.

Tape Recordings and Cell Phones:

Tape recording of lectures is permitted. You may not tape record any information or class discussion when a graded test is being reviewed. Cell phones and pagers are prohibited unless the instructor has granted permission to have them in class.

Return of Exams: Not applicable**Grade Postings:**

Exam grades will be posted using D2L.

Plagiarism Statement:

“By enrolling in this course, the student expressly grants MSU a “limited right” in all intellectual property created by the student for the purpose of this course. The “limited right” shall include but shall not be limited to the right to reproduce the student’s work product in order to verify originality and authenticity, and educational purposes.”

Lower Grades:

The instructor reserves the right to lower any student’s final grade by a letter grade (i.e., A to B, D to F) for:

- (A) A negative, rude, unreasonably argumentative or inattentive attitude in class, or,
- (B) Repeatedly disrupting the class for any reason (tardiness), or,
- (C) Not showing respect for fellow classmates' questions or opinions.

Course Content and Outline:

Essentials of Econometrics, 3/e Damodar N. Gujarati

Table of Contents

Chapter 1 The Nature and Scope of Econometrics

Part I BASICS OF PROBABILITY AND STATISTICS

Chapter 2 Review of Statistics I: Probability and Probability Distributions

Chapter 3 Characteristics of Probability Distributions

Chapter 4 Some Important Probability Distributions

Chapter 5 Statistical Inference: Estimation and Hypothesis Testing

Exam I – Will be on D2L and is scheduled for Friday, June 12, starting either at 2:00pm or 10:00pm with a one-hour time limit.

Part II THE LINEAR REGRESSION MODEL

Chapter 6 Basic Ideas of Linear Regression: The Two-Variable Model

Chapter 7 The Two-Variable Model: Hypothesis Testing

Chapter 8 Multiple Regression: Estimation and Hypothesis Testing

Chapter 9 Functional Forms of Regression Models

Chapter 10 Dummy Variable Regression Models

Exam II – Will be on D2L and is scheduled for Monday, June 22, starting either at 2:00pm or 10:00pm with a one-hour time limit.

Part III REGRESSION ANALYSIS IN PRACTICE

Chapter 11 Model Selection: Criteria and Tests

Chapter 12 Multicollinearity: What Happens if Explanatory Variables are Correlated?

Chapter 13 Heteroscedasticity: What Happens if the Error Variance is Nonconstant

Chapter 14 Autocorrelation: What Happens if Error Terms are Correlated?

Final Exam [Exam III] – Will be on D2L and is scheduled for Monday, July 2, starting either at 2:00pm or 10:00pm with a one-hour time limit.

Part IV ADVANCED TOPICS IN ECONOMETRICS*

Chapter 15 Simultaneous Equation Models

Chapter 16 Selected Topics in Single Equation Regression Models

APPENDIX A: STATISTICAL TABLES

APPENDIX B: COMPUTER OUTPUT OF EViews, MINITAB, EXCEL, AND STATA

*This section is not covered.