

ECON 4875, EMPIRICAL LINEAR MODELING
UNIVERSITY OF NORTH TEXAS
SPRING 2011

Instructor: Margie Tieslau
Office: Hickory Hall, 220 E
Phone & e-mail: 940.565.3442; tieslau@unt.edu
Office Hours: Wed. & Thurs.: 1:30 PM – 4 PM in Hickory Hall 220 E
Wed. & Thurs.: 5:30 PM – 6:30 PM in Gateway 141

COURSE OBJECTIVES:

The objective of this course is to provide the tools necessary to analyze, interpret, and develop empirical applications of econometric estimation procedures. We will explore an assortment of applied problems that are typically encountered in real-world quantitative research, with particular attention given to examples typically encountered in the fields of accounting, business, economics, finance and political science. At the completion of the course, you will have developed proficiency in the following areas: (1.) organizing and manipulating data; (2.) estimating linear and intrinsically-linear regression models; (3.) interpreting econometric results and computer output; (4.) engaging in applied research & data analysis; and, (5.) working in SAS.

PRE-REQUISITE:

The pre-requisite for this course is a grade of "B" or better in ECON 4870, "Introduction to Econometrics." Since this course builds on material covered in ECON 4870, it is essential that this pre-requisite be met; students who choose to enroll without having met the pre-requisite will have a difficult (if not impossible) time passing this class.

TEXT/READING MATERIAL:

There is no required text for this course. However, since the course builds on the material covered in ECON 4870, your notes from that class will be a useful source of information. In addition, you may want to re-read portions of the primary text from the introductory regression course, either *Basic Econometrics*, by Gujarati, or *Introductory Econometrics*, by Wooldridge, to refresh your memory on various topics.

COURSE STRUCTURE:

The first portion of the class will focus on lecture material. The second portion will be allocated to lab work on computer exercises that focus on the material covered in the lecture. Students are required to work on lab exercises during the lab period and are encouraged to use lab time wisely in order best to learn the techniques discussed in the lecture.

GRADING SCHEME:

Assignment:	Points:
3 homework assignments	40 points each
Research project	100 points
Final exam	100 points
	Total points possible = 320

Grades for the course will be based on the total number of points accumulated.

Homework & Presentations:

Homework assignments and presentations will focus on applications similar to those discussed in lecture. The presentations will be related to one of the homework assignments and the research project, and students will be expected to present (using PowerPoint or pdf file) in front of the class.

Research Project:

For your research project, you will work on a regression project provided by Buxton Co., a consulting company in Ft. Worth. You will clean up and analyze a data set, build and estimate a regression model, interpret the output, and make a recommendation to the client on some aspect of their business. All students will be required to make a presentation in front of the class that describes their work. NOTE: **Class attendance is required once work on the project begins.** Further details will be supplied at a later date.

Final Exam:

The final exam will take place on the Wednesday evening of finals week. The exam will be "closed book" and "closed notes" but you will be able to bring a limited formula sheet.

CLASSROOM POLICY:

During class time (including exam time) students are forbidden to have or use electronic devices such as a laptop computer, Palm Pilot, BlackBerry, cell phone, Bluetooth devices, or anything that uses headphones, earphones, ear buds or the like (except in special cases where students have verified disabilities that require such devices)

SOFTWARE:

The software package used in this course is PC SAS (Statistical Analysis System), version 9. This software is widely used in industry and academia. Knowledge of this software should give students excellent preparation for either the job market or further academic study.

You will not be permitted to use the computers in our classroom (Gateway 141) at any time other than our class period. As long as you have a valid UNT ID, you will be permitted to use any of the general access labs supported by the College of Arts & Sciences, all of which have SAS version 9 available. The chart on the next page shows the location and hours of operation of each of the general access labs supported by the College of Arts & Sciences. You also might be able to access SAS through other labs on campus, but this is not guaranteed by your instructor.

LOCATION AND HOURS OF OPERATION OF CAS GENERAL ACCESS LABS:

	GAB 330	GAB 550	Terrill 220	Wooten 120
Monday through Thursday	8 AM – 2 AM	8 AM – 10 PM	8 AM – 10 PM	8 AM – 12 midnight
Friday	8 AM – 5 PM	8 AM – 5 PM	8 AM – 5 PM	8 AM – 5 PM
Saturday	12 noon – 8 PM	closed	closed	12 noon – 8 PM
Sunday	12 noon – 2 AM	closed	closed	closed
Closed on the following days	March 12 – 19; May 14 – 15	March 14 – 18	March 14 – 18	March 12 – 19; May 14 – 15

For more information, please visit: <http://www.cas.unt.edu/gal/>.

E-MAIL:

I do not read e-mail every day. In addition, I receive a huge volume of e-mails every day. Thus, it may take several days (or perhaps longer) for me to get to each message. If you want to maximize the probability that I will read and respond to your e-mail in a timely manner, you should: (1.) use "ECON 4875" in the subject heading; (2.) use your real name in the "from" line; (3.) sign your e-mail using your full name.

NOTE:

Class attendance is not optional. If you miss class it is **your responsibility** to find out what was covered on that night and make up the missed material.

SIX HOUSE RULES:

1. No food or drink in the computer lab.
2. Turn off cell phones, BlackBerrys, beepers, *et cetera* during class time.
3. Do NOT work on the computer during class time until told to do so. Don't even touch it!
4. When working in SAS, always read the log window FIRST (starting at the TOP).
5. When in this classroom, print ONLY material related to this class.
6. Question everything! Always ask "why?" Be curious!

TENTATIVE COURSE OUTLINE:

REVIEW OF BASIC REGRESSION & INTRODUCTION TO SAS:

Reading in Gujarati: chapters 1 – 5 (including appendices 3A and 5A) and chapters 7 & 8.

Reading in Wooldridge: chapters 2 – 5.

ORGANIZING & ANALYZING DATA:

Reading: class handout

INFERENCE IN REGRESSION:

Reading in Gujarati: chapters 1 – 5 (including appendices 3A and 5A), chapters 7 & 8.

Reading in Wooldridge: chapters 2 – 5.

Also: "Cassandra's Open Letter to her Economists Colleagues" by D. McCloskey.

DATA ISSUES:

Reading in Gujarati: sections 1.7 and 6.2.

Reading in Wooldridge: chapters 1, 6 and 9.

DUMMY VARIABLE REGRESSION:

Reading in Gujarati: chapter 9.

Reading in Wooldridge: chapter 7.

INTRINSICALLY LINEAR REGRESSION:

Reading in Gujarati: chapters 6 and 14.

Reading in Wooldridge: chapter 6.

THE LINEAR PROBABILITY MODEL:

Reading in Gujarati: sections 15.1 through 15.4.

Reading in Wooldridge: section 7.5.

ALL READINGS REFER TO THE FOURTH EDITION OF GUJARATI AND THE THIRD EDITION OF WOOLDRIDGE.

CHEATING AND PLAGIARISM

The UNT Department of Economics adheres to the University's Policy on Cheating and Plagiarism. To view the complete policy go to www.vpaa.unt.edu.

Cheating: Cheating is defined as the use of unauthorized assistance in an academic exercise, including but not limited to:

1. use of any unauthorized assistance to take exams, tests, quizzes or other assessments;
2. dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems or carrying out other assignments;
3. acquisition, without permission, of tests, notes or other academic materials belonging to a faculty or staff member of the University;
4. dual submission of a paper or project, or re-submission of a paper or project to a different class without express permission from the instructor;
5. any other act designed to give a student an unfair advantage on an academic assignment.

Plagiarism: Plagiarism is defined as the use of another's thoughts or words without proper attribution in any academic exercise, regardless of the student's intent, including but not limited to:

1. the knowing or negligent use by paraphrase or direct quotation of the published or unpublished work of another person without full and clear acknowledgement or citation.
2. the knowing or negligent unacknowledged use of materials prepared by another person or by an agency engaged in selling term papers or other academic materials.

DISABILITY ACCOMMODATION

If you have a disability for which you will require accommodation under the terms of the Americans with Disabilities Act or Section 504 of the Rehabilitation Act of 1973, please discuss your needs with me after class or at office hours.

The Economics Department cooperates with the Office of Disability Accommodation (ODA) to make reasonable accommodations for qualified students with disabilities. If you have not registered with ODA, we encourage you to do so. Please present your written accommodation request on or before the 4th class day.