

Econ 488 – Applied Managerial Econometrics

Fall 2009 CSUCI
Class times:
Lecture: Friday, 9:00-11:50am
Lab: Friday, 12:00 - 1:50 pm

Cameron Kaplan
Office location: 2016 Sage Hall
email: cameron.kaplan@csuci.edu
Office hours:
Friday: 2:00pm-3:00pm and by appointment

1 Course Information

1.1 CSUCI's catalog description:

Applied Managerial Econometrics with lab (4 units): Three hours lecture and two hour lab per week

Prerequisite: MATH/PSY 202 or MATH 329 or 352, ECON 310 or ECON 329 and MATH 150

Emphasis on the collection and manipulation of economic data, and the application of econometric methods to business and resource management issues. Development of testable hypotheses, applications of estimation techniques and interpretation of regression results. Use of econometric software applications to estimate statistical relations.

Students with disabilities who believe they may need accommodations in this class are encouraged to contact the Disability Resource Programs (DRP), <http://www.csuci.edu/disability/>, as soon as possible to better ensure such accommodations are implemented in a timely fashion.

1.2 Learning Objectives

Students who successfully complete this course will be able to:

- Collect appropriate data for various types of analyses.
- Manage and prepare data for empirical analysis.
- Formulate testable hypotheses on the basis of economic or management theory.
- Employ econometric techniques to test hypotheses.
- Perform and interpret the results of multiple linear regression.
- Detect and correct basic problems in regression analysis.
- Generate forecasts from results obtained with multiple-regression model.

1.3 Text and Materials

1. *Using Econometrics: A Practical Guide*. A. Studenmund, Fifth Edition, Pearson Addison Wesley, 2006.
 - This will be the main text for this class. It is available at the bookstore.
2. *Using gretl for Principles of Econometrics*. L Adkins, Version 1.31, Oklahoma State University, 2009.

- This is a free text book available at <http://www.learneconometrics.com/gretl/ebook.pdf>
3. gretl econometrics software
- Available for free at <http://gretl.sourceforge.net/>

2 Class Policies and Grading

2.1 General Class Policies

2.1.1 Attendance

Lecture and laboratory attendance is mandatory. Weekly lab assignments will be given in class. If you plan on missing a class, please inform the instructor before class.

2.1.2 Make-Ups and Late Work

Late work will not be accepted. If you fail to turn an assignment in on time, you will receive a zero. Make-up exams will not be permitted. If you are unable to make it to one of the exams, please contact the instructor as soon as you discover the conflict.

2.1.3 Cheating and Academic Misconduct

Academic misconduct includes the following examples as well as any other similar conduct which is aimed at falsely representing a student's academic performance: cheating, plagiarizing, unauthorized collaborating on course work, stealing course examinations or materials, falsifying records or data, or intentionally assisting another individual in any of the above.

If you are caught cheating on an exam or an assignment, you will receive a zero on the exam or assignment. In addition, the event will be reported to the Office of Judicial Affairs and may lead additional actions from the University.

2.1.4 Use of Cell Phones

The use of cell phones during lectures and sections is a disrespectful distraction to your instructor and other classmates. Please turn your cell phone and other electronic devices off while you are in class. In emergency situations, please discuss limited use of cell phone with the instructor prior to the class during which you would like to use your cell phone.

2.1.5 Use of Computers

The classroom is equipped with computers for every student. Please do not use the computers for anything other than assigned work. This includes checking email, playing games, surfing the web, etc.

2.1.6 Email

In general, email is the best way to get in contact with me. I will be happy to answer questions via email as long as they don't require too much explanation. However, if you send me an email within 24 hours of an exam or assignment deadline, don't expect me to respond before the exam/due date.

2.2 Components of Grade

2.2.1 Lab Assignments/Homework (10%)

Each week during the lab portion of the class, you will get a lab assignment, which will be done in class using the computers. Each assignment will have several discussion questions, which should be turned in the following week, unless otherwise specified. You may work in groups of 2-3. You may drop the score from your lowest lab write-up.

2.2.2 Midterm (20%) - October 16th

The midterm will be given in class on March 20th.

2.2.3 Final Exam (25%) - December 11

The final exam will be given during the scheduled final time on May 15th at 8am. Notice the start time.

2.2.4 Research Project (45%)

You will be responsible for carrying out an original research project over the duration of the course. The research project must use multiple regression analysis to address an issue related to economic policy or theory. You may also use this project as a starting point for your economics capstone project. Your topic must be approved by the instructor prior to the submission of the formal research proposal on March 13th. Please plan on meeting with the instructor in office hours or another convenient time prior to this date. The research project will consist of the following components:

1. Proposal (5%) - Due October 9th. Write a 1-2 page proposal of your planned research topic. A proposal should define and motivate the topic, provide a literature review, describe the model and plan for collecting the data. If you have the data, then present the summary statistics.
2. Oral Presentation (10%) - In Class December 4th. Each student will give a brief (~10 minute) presentation of their research to the rest of the class. You will be given feedback in time to revise your final paper.
3. Written Paper (30%) - Due December 11th at 10:00am (No Extensions). Each student will prepare a research paper in the format of an economics journal article. Your paper should include: an introduction, a brief literature review, descriptive statistics of the data, specification of the model, preliminary results and hypothesis tests, and a conclusion describing what future research (if any) is needed and how you could revise your model. Approximately half of the paper should contain written analysis, and half of the paper should be charts and tables. The paper should be between 15-25 pages including all charts and tables.

Topics from other previous classes:

- The Effect of Climate Change on Agricultural Output
- Effect Of Country's GDP On Its Rating In Olympic Games
- The Effect of Distance to Freeways On Gas Prices
- The Worldwide Price Elasticity Of Cigarette Demand
- Do Private Schools Send More Students to College?
- The Effect of Religion on GDP
- Who is Most Likely to be a Victim of Crime?

2.3 Overall Grade

Overall, the course will be curved such that the average grade is approximately a B.

3 Class Calendar

Coverage of lecture topics will proceed at the approximate rate of one to two chapters per week. The following schedule is tentative; it is recognized that this is subject to change as circumstances dictate. Please keep yourself updated by visiting the course website and noting the assignments for each week!

Tentative schedule for Econ 488, Spring 2009

Date	Topic/Test	Comments
Friday, August 28	Regression basics, review of some statistical concepts.	Read Ch. 16
Friday, September 4	Review of some statistical concepts (continued) and Basic Regression Analysis.	Read Ch. 1
Friday, September 11	OLS Procedure, Simple and multiple regression	Read Chs. 2 & 3
Friday, September 18	Simple and multiple regression (continued)	Read Ch. 4
Friday, September 25	Hypothesis testing, Confidence Intervals	Read Ch. 5
Friday, October 2	Model specification	Read Ch. 6
Friday, October 9	Model specification (continued)	Read Ch. 7
Friday, October 16	Midterm	
Friday, October 23	Multicollinearity	Read Ch. 8
Friday, October 30	Serial Correlation	Read Ch. 9
Friday, November 6	Heteroskedasticity	Read Ch. 10
Friday, November 13	Regression Applications and Extensions	Read Ch. 11
Friday, November 20	Time Series and Forecasting	Read Ch. 12 & 15
Friday, November 27	Thanksgiving - No Class!	
Friday, December 4	Presentations	Read Ch. 13 & 14
Friday, December 11	Final Exam	