Econ 488 – Applied Managerial Econometrics

Fall 2008 CSUCI Class times: Lecture: Friday, 9:00-11:50am Lab: Friday, 12:00 - 1:50 pm Cameron Kaplan Office location: 2016 Sage Hall **email:** kaplan@econ.ucsb.edu **Office hours:** Thursday: 10:00am-11:00am

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.
- 2. SPSS 16.0 Guide to Data Analysis, M. Norusis, Second Edition, Prentice Hall, 2008.

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 me 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 me 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 as your "Lab Write-Up." You may work in groups of 2-3, but each person must turn in their own lab write-up. You may drop the scores from your two lowest lab write-ups

2.2.2 Midterm (20%) - October 17th

The midterm will be given in class on October 17th.

2.2.3 Final Exam (25%) - December 12th

The final exam will be given during the scheduled final time on December 12th.

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 you economics capstone project. Your topic must be approved by the instructor prior to the submission of the formal research proposal on October 24th. 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 24th. 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 5th. 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 12th 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 similar classes:

- The Price Of Art: The Effect Of Artist Popularity
- Effect Of Country's GDP On Its Rating In Olympic Games
- Popularity Of Soccer And The Performance Of The National Teams
- The Worldwide Price Elasticity Of Cigarette Demand
- The Effect Of Prevalence Of Modern Contraception Methods On The Level Of Fertility Rate
- Economic Freedom And Growth

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!

Date	Topic/Test	Comments
Friday, August 29	Regression basics, review of some statistical	Read Ch. 16
	concepts.	
Friday, September 5	Review of some statistical concepts	Read Ch. 1
	(continued) and Basic Regression Analysis.	
Friday, September 12	OLS Procedure, Simple and multiple	Read Chs. 2 & 3
	regression	
Friday, September 19	Simple and multiple regression (continued)	Read Ch. 4
Friday, September 26	Hypothesis testing, Confidence Intervals	Read Ch. 5
Friday, October 3	Model specification	Read Ch. 6
Friday, October 10	Model specification (continued)	Read Ch. 7
Friday, October 17	Midterm	
Friday, October 24	Multicollinearity	Read Ch. 8
Friday, October 31	Serial Correlation	Read Ch. 9
Friday, November 7	Heteroskedasticity	Read Ch. 10
Friday, November 14	Regression Applications and Extensions	Read Ch. 11
Friday, November 21	Advanced Topics - 2SLS, probit, logit, etc.	Read Ch. 13 & 14
Friday, November 28	Thanksgiving - No Class	
Friday, December 5	Presentations	
Friday, December 12	Final Exam	

Tentative schedule for Econ 488, Fall 2008