Econ 488 and 488(L), Applied Managerial Econometrics
SPRING 2008, CSUCI
Friday, 9:00–11:50 am; 12:00– 1:50pm (Ojai 1952, lecture and lab)

INSTRUCTOR: Prof. Gregory Hildebrandt (gregory.hildebrandt@csuci.edu)
Office Hours: Friday, 2:00–3:30 pm, 2042 Sage Hall. The instructor is available later than 3:30 pm on Friday, if there is a specific student request. However, please notify the instructor during class if such a meeting is requested.   Depending on computer lab availability, office hours may occasionally be held in Ojai 1952.

LEARNING OBJECTIVES:

The purpose of this course is to provide an introduction to the applied quantitative and analytical skills necessary to decision-makers in many contexts including the private and public sectors. The key analytical technique developed in the course, regression analysis, is the most widely used tool in the social and investment sciences, and plays an important role in management science, marketing, organizational behavior, and other areas of business. Emphasis is placed on learning-by-doing: students develop fundamental econometric skills through the use of empirical data and the SPSS statistical software which augments the lecture-based instruction. The use of econometric techniques draws a critical link between theoretical models and empirical applications. In terms of scope of coverage and ease of use, SPSS may be the premier statistical package. It is available in the lab and the school library.

Students who complete this course will be able to:
  • Collect appropriate data for various types of analysis.
  • Manage and prepare data for empirical analysis.
  • Formulate testable hypotheses on the basis of economic and management theory.
  • Employ econometric techniques to test hypotheses.
  • Perform and interpret the results obtained using multiple linear regression.
  • Detect and correct basic problems in regression analysis.
  • Generate forecasts from results obtained with multiple-regression model.

PREREQUISITES:

        ECON 310 or 329; MATH 150; BIOL 302 or MATH 340 or MATH 342

COURSE MATERIALS:

        Using Econometrics: A Practical Guide. A. Studenmund, Fifth Edition, Pearson Addison Wesley, 2006. (S)
        SPSS 15.0 Guide to Data Analysis, M. Norusis, Prentice Hall, 1998. (N)

        The publication of SPSS 16.0 *Guide to Data Analysis* will follows by several months the recent publication of the Fifth Edition of *Using Econometrics*, and is not available for the course. M. Norusis has indicated to the instructor that this should not create problems. There are mainly changes in screen design in SPSS 16.0. Also, a student version of SPSS is available at a significant discount, but only the base model is included. The student version may be adequate for the course paper, but there will be discussions in class requiring several of the modules not included in the student version.

GRADING CRITERIA:

The grade will be based on the following:

EVALUATION	WEIGHT
Midterm Exam	25%
Final Exam	35
Research Paper Proposal	5
Research Paper	35

Exams: The midterm will be closed-book exams. The midterm exam will be taken at the beginning of the class period and two hours are available to complete the exam. There will be a review session for the midterm on Mar 7 and for the final exam on May 9. Additional information will be provided in class about the structure of the exams, and the extent to which the final exam will cover the first and second parts of the course.

Research Paper: Each student will prepare a research paper that will address an issue of interest to the student using multiple-regression analysis. The form of the paper will consist of 1.Introduction and description of data employed; 2. Descriptive statistical analysis of data using graphs and charts; 3. Specification of the model to be estimated;   4. Preliminary model results, tests of relevant hypotheses and model assumptions, and the inclusion of a revised model based on tests performed; and 5. Conclusions. Many government internet sites such as the Bureau of Economics analysis (www.bea.gov); the Department Transportation (www.dot.gov) and the Bureau of Labor Statistics (www.bls.gov) contain data. One might also obtain data from local organizations such as the Port of Hueneme, or a local business to conduct the analysis. Ideally, the interests of the student may, with instructor's permission, determine the topic addressed. For example, if a student has a clear idea what professional area he/she is interested in pursuing following graduation, a paper addressing an issue in an area of interest can be proposed. Beginning the second class meeting, the instructor will meet with individual students and determine if there is a topic that both satisfies the interests of the student and the requirements of the course. Each research paper will be at least fifteen pages in length, with approximately half the paper containing written analysis, and half containing charts and tables. Depending on the topic, longer papers may be appropriate. To avoid deductions for late submissions, the analysis will be submitted at the beginning of class on Friday, May 9. The paper should also be posted on Blackboard by the end of the academic day on May 9. Students may submit a PowerPoint presentation of the research paper to the instructor by e-mail, with relevant notes included, through 9 May. This will not be graded. If appropriate comments will be provided as quickly as possible. However, the graded course paper should be written in standard paper format including a bibliography.

Research Paper Proposal: The research paper proposal will be submitted at the beginning of class on Friday, Mar 28. The proposal should include a statement of the research question to be investigated; the hypothesized relationship to be estimated; the expected signs of the regression coefficients; and the data sources to be employed. The proposal should submitted in PowerPoint briefing form including notes section with both outline and relevant equation charts that address the proposal.

Homework: Students are encouraged to solve the first several odd numbered questions at the end of each Studenmund chapter. If there are odd numbered questions that are particularly relevant, this information will be disseminated in class. These will not be submitted for grade, but will be discussed in class. The answers to the even numbered questions are in the back of the Studenmund textbook, and several of these will also be discussed.

ACADEMIC HONESTY

All work that team members submit for their Research Paper Proposal and Research Paper must, in fact, be the team's own work. Verbatim language taken from other sources -- books, papers, web sites, people, etc. -- must be placed in quotation marks and the source identified. Students are encouraged to consult with the instructor on when and how to document sources if they have questions. Similarly, as is well understood, work on tests and exams must be the student's own work.

ASSIGNMENTS

DATE	ASSIGNMENT
Jan 25	S, Ch. 1; N, Chs. 1, 9, 20
Feb 1	S, Ch. 2;, N, Chs 2, 3
Feb 8	S, Ch. 3; N, Chs. 4 - 6
Feb 15	S, Ch. 4; N, Chs. 7, 8, 12
Feb 22	S, Ch. 5; N, Chs. 14, 21
Feb 29	S, Ch. 6; N, (Cont.)
Mar 7	S, Ch. 7; Review of lecture materials
Mar 14	Midterm; N review
Mar 28	S, Ch. 8; N, Ch.22
Apr 4	S, Ch. 9; N, Ch. 23
Apr 11	S, Ch. 10; N, Ch. 24
Apr 18	S, Ch. 11; N, Chs. 21 -24 (cont)
Apr 25	S, Ch, 13; N, Ch. 10, 11, 17
May 2	S, Ch. 14; N, (Cont.)
May 9	S, Ch. 15, pp. 511-525; Review