ECONOMETRICS 120B

Course Description:

The course extends and builds on the ideas of 120A. We will examine how scientists use the probability theory we have seen, first for the evaluation of sample means. We then introduce regression theory, for which this can in the most part be considered the examination of conditional means thus allowing the study of interactions between phenomena.

TextBook

Wonnacott, T.H. and R.J. Wonnacott, (1990) <u>Introductory Statistics for Business and Economics</u>, Fourth Edition, John Wiley and Sons:New York. (for the first two topics, do not buy it if you do not already have it, your text from 120A will be fine).

Ramunathan, R, (2002), Introductory Econometrics with Applications, Fifth Edition, Harcourt College Publishers. (this will also be used by Professor Thoma in 120C in the spring).

Course Outline

The course outline gives a rough estimate of the classes that will cover the topics and the reading required from the text.

- I. Hypothesis Testing, Jan 8,10,15.
- II. Confidence Intervals. Jan 17,22.
- III. Simple Linear Regression Model. Jan 29,31, Feb 5, 7, 12.
- IV. Multiple regression. Feb 14, 19, 26, 28.
- V. Multicollinearity, Mar 5.
- VI. Qualitative Independent Variables. Mar 7,12,14.

Statistical software: We will be using computers and real world data in problem sets and class. All of the statistics in this course can be done using the Microsoft Excel spreadsheet program, which is available in the computer laboratory in Econ 100. Accounts are required to use this lab. You may use other econometric or statistical software. Data, Problem sets and solutions will also be available from the class webpage (at www.econ.ucsd.edu/~gelliott/Economics120B.htm)

Grading

There will be a number of assignments (probably 5), two midterm examinations (January 24 and February 21 in class) and a final exam during exam week. The assignments have a total weight of 20% of the final grade, the midterms are each worth 20% and the final is worth 40% of your grade. In computing your problem set grade I will drop your single worst score. It is important to do problems in this course, understanding the problems is the best preparation for the exams. Assignments are due at 4pm (or when the econ office closes) on the day specified, in my mail box in Econ 210. If there is class that day they can be handed in a box at the back of the classroom. Do not interrupt class to hand in assignments. Do not come to my office to hand in assignments. Late assignments will not be accepted (the answer key is immediately posted on the web so I cannot accept late assignments).

Exam policies: You may bring a calculator to exams, although a simple one is enough. All grading problems (exams and problem sets) must be rectified within a week my returning the work. There will be no regrading of exams written in pencil. Makeup exams will only be given if absence is due to medical reasons (Doctors certificate required). In general, makeup exams will be at least as difficult as the regular exam, most likely harder.

Office Hours

My office hours are from 2.30-3.30 pm Tuesday and 1-2pm Wednesday. You will be advised as to the TA's office hours.