Department of Economics
University of California, San Diego

Fall 2000
Prof. Alan Sorensen
asorensen@ucsd.edu

Economics 120-B
ECONOMETRICS

Overview

This course is an introduction to regression analysis. Using a variety of economic examples, we will discuss how to specify, estimate, and interpret linear regression models. This is the second course in the three-course econometrics sequence; Economics 120-A is a prerequisite.

The textbook for the course is Ramu Ramanathan's *Introductory Econometrics with Applications*. It is available for purchase at the UCSD bookstore, and at least one copy will be on reserve at the library. You will also have access to the computer lab at the Economics Department, where you will be using the regression package provided in Microsoft® Excel to analyze data and estimate regression models.

Course Information

Lectures:	Tues/Thurs 12:45-2:05 PM, Center Hall 101
Instructor's office hours:	Mon. 3:00-4:00 PM, Fri. 9:30-10:30 AM, Economics 312
Course web page:	http://econ.ucsd.edu/~asorense/ec120b.html
Teaching Assistants:	TBA

Requirements

Your grade in this course will be based on the following (grade weights in parentheses):

(20%) Problem Sets. Six problem sets will be distributed throughout the quarter. You may work on them in groups; however, each student must turn in his or her own set of answers. Each problem set will receive a grade of 3, 4, or 5 points, depending on the quality of the answers. (If you don't turn in a problem set, you receive 0 points.) Solutions will be posted on the course web page. Late problem sets will NOT be accepted.

(40%) Midterm Exams. There will be two in-class midterm exams during the quarter. Make-up exams will *not* be offered; if you miss an exam, your grade for that exam is 0. Tentative exam dates are as follows:

Thursday, October 12	Midterm #1
Thursday, November 9	Midterm #2

(40%) Final Exam. The final exam will be comprehensive. The scheduled date for the exam is Thursday, December 7, 11:30 AM - 2:30 PM.

Tentative Course Outline
(see course web page for schedule of reading assignments)

Introduction & Review

A. What is econometrics?
B. Review of useful statistical distributions
C. Estimators and desirable properties of estimators

Simple Linear Regression

A. The basic model: explanation and underlying assumptions
B. Estimation by Ordinary Least Squares (OLS)
C. Properties of OLS estimators
D. Goodness of fit
E. Hypothesis testing and confidence intervals
F. Questions of causality

Multiple Linear Regression

A. The model: explanation and interpretation
B. OLS estimation
C. Goodness of fit
D. Hypothesis testing
E. Specification errors and their consequences
F. Multicollinearity
G. Double-log and semi-log specifications
H. Qualitative independent variables