Economics 472
Introductory Econometrics
Fall 2002

MW 11:00-12:15, Heady 274
F 11:00-11:50, Heady 272 (or, occasionally, Heady 68)

COURSE SYLLABUS AND OUTLINE

Instructor:
Professor Barry Falk
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Office Hours: MW 9:00 – 11:00 and by appointment.

TA:
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Office Hours: T Th 10:00-11:30

Prerequisites:
Economics 301, Economics 302, and Statistics 227 (or equivalent). If you are unsure of whether you are adequately prepared for this course, please see the instructor to discuss your situation.

Textbook:
Associated Website for Students: http://www.mhhe.com/econometrics/gujarati4

Class Homepage:
http://www.econ.iastate.edu/classes/econ472/falk/homepage.htm

Course Description:
Econometrics is the branch of economics that is concerned with the development of procedures to estimate relationships among economic variables and to test hypotheses about these relationships. The relationships and hypotheses are derived from economic theory while the estimation and test procedures are derived from statistical theory. This course will focus on estimation and test procedures that can be applied when the relationship of interest can be formulated as a simple or multiple linear regression model. Applications of the linear regression model in economics will be stressed throughout the course.

Computer Usage and Software:
The actual computations of the estimates and test statistics that are used to fit and evaluate the linear regression model are done by computer. There are many good software packages available that make it easy to perform the kinds of statistical analysis that will be of interest to us. However, it will be convenient for us all to use the same software package.
We will use Eviews, which is contained on a CD that comes packaged with the textbook. Students will learn how to use EViews as part of the course.

Course Requirements and Grading:
There will be a midterm exam (Wednesday, October 23), a final exam (Monday, December 16, 9:45-11:45 a.m.), and a number (about 8-10) of problem sets. Grades will be determined according to the following weights: Midterm = 35%, Final = 45%, and Problems = 20%.

Course Outline:

All chapters and page numbers refer to the Gujarati book.

1. Introduction (pp. 1-13)
2. Review of Basic Concepts from Probability Theory (pp. 869-890)
3. The Simple Linear Regression Model: Specification, Estimation, and Inference (Ch.s 1-6)
4. The General Linear Regression Model: Specification, Estimation and Inference (Ch.s 7-8)
5. Dummy Variables in a Regression Model (Ch. 9)
6. Multicollinearity, Heteroskedasticity and Autocorrelation (Ch.s 10-12)
7. Model Specification and Diagnostic Testing (Ch. 13)
8. Nonlinear Models (Ch.14)

Additional Topics will be covered as time permits.