Econometrics Autumn Term 2003

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Office hour: Wednesday 2:30-3:45

Course Text Book:

Introductory Econometrics, **Jeffrey M. Wooldridge, second edition MIT Press**

Course Outline

Lecture 1 Introduction, Empirical analysis in Economics, Public Policy and Business. Causation versus correlation. The basic two variable regression model.

Lecture 2 The classical linear regression model and its assumptions; fitting a regression line to data; the method of Ordinary Least Squares; Unbiasedness; Precision and standard errors; Goodness of fit.

Lecture 3 The concept of efficiency; an alternative method of line fitting; which one do we choose? The Gauss Markov theorem.

Lecture 4 Hypothesis testing under Normality. Hypothesis testing without normality in large samples. Confidence intervals.

Lecture 5 The impact of measurement error on the dependent variable and the impact of measurement error on the regressor. Chapter 13. Is linearity a good assumption for our problem? Choosing the functional form.

Lecture 6 The Multiple Regression Model. The Coefficient of Determination The model with two regressors.

Lecture 7 The Multiple regression model continued – Matrix Approach Stepwise regression and its applications. Omitted variables.

Lecture 8 Hypothesis Testing in the Multiple Regression Model.

Lecture 9 Multicollinearity **–** Near and Exact. Relaxing Some of the Classical Assumptions: Heteroskedasticity and Autocorrelation.

Lecture 10 Catching Up!