

Empirical Methods in Applied Microeconomics
ECO 444, IIT Kanpur
Jan-April 2012

Course Description

A central objective of this course is to analyze and assess empirical social science research. It will build on topics covered in introductory econometrics courses, with a focus on the application of methods to deal with empirical problems when working with real-world data. Policies and programs in a broad range of areas will be examined, including labor, welfare and poverty, development, health, education, and industry. Econometrics I is a pre-requisite for this course. Below is a rough summary of the course structure. There might be materials covered in the class which are not directly out of the text or slides and hence I would strongly encourage you to attend all the classes.

Suggested Readings:

Joshua D. Angrist, Jorn-Steffen Pischke, *Mostly Harmless Econometrics: An Empiricist's Companion*, Princeton University Press, 2008

Wooldridge, Jeffrey M. *Introductory Econometrics: A Modern Approach*. 3rd ed. Mason, OH: Thomson/South-Western, 2006. ISBN: 9780324289787.

Hill, Griffiths, Lim, *Principles of Econometrics*, John Wiley and Sons

In addition to these books, we will cover many **Journal Papers in class**. The papers constitute compulsory reading. You would be responsible for creating the full list of articles covered in class.

Course Structure: (This is only a rough outline of the topics that would be covered)

Introduction to the course; Correlation vs Causality: WJ 1,2 , Blundell 1-4

Experimental Approach: ATE, ATT: AP 2, Blundell 4-16

Observational Studies and Regression, Overview of research design, and examples

Measurement Error and Omitted Variables Bias, Applications

Experimental Designs, Applications

Quasi-Experimental Designs, Applications

Selection on Observables: Matching and Propensity Scores, Applications

Selection on Observables: Fixed Effects, Pre-Post Designs and Difference in Differences, Applications

Regression Discontinuity, Applications

Instrumental Variables, Applications

Recent Developments in the field: Discussion of papers on new methods and applications