S301 – Applied Econometrics

Aims:

The aim of this module is to enable students to follow modern applied econometric papers and critically interpret empirical output, including an understanding of the limitations imposed by the econometric techniques and the data available. The emphasis throughout will be on intuitive treatment of the issues rather than detailed technical derivations. This will include discussion of empirical papers that address policy issues via data analysis.

Books:

There are several very good books covering aspects of this course including

- Angrist and Pischke Mostly Harmless Econometrics
- Wooldridge Econometric Analysis of Cross Section and Panel Data.

Topics:

The lecture courses for this paper are as follows:

- 1. Potential outcomes framework
- 2. Randomised control trials
- 3. Regression/selection on observables
- 4. Instrumental variables
- 5. Difference-in-differences
- 6. Regression discontinuity
- 7. Sample selection and switching regression models
- 8. Fixed effects and random effects, Hausman tests for poolability
- 9. Extremum estimators
- 10. Simulation
- 11. Simulated Method of Moments
- 12. Bootstrap