

## Econometrics I: 2014

1. Method of least squares, graphical demonstration, least squares estimates (matrix notation), interpretation – Frisch-Waugh theorem
2. Conditional expectations, Population regression, Linear Projection
3. Statistical properties: Statistical Model (assumptions on the population), mean and variance of estimates, Gauss-Markov theorem
4. Finite sample results: Normality of disturbance term, variance of  $\hat{\sigma}^2$ , inference and hypothesis tests – t and F
5. Special topics: Restricted least squares,  $R^2$  and model selection, omitted variable bias, multi-collinearity, dummy variables

### Books

The material is standard and there are many textbooks. Greene, *Econometric Analysis* is a comprehensive text. Wooldridge, *Introductory Econometrics* is an excellent text that is especially good for concepts (the mathematical level is a little lower than that of this course). Maddala, *Introduction to Econometrics* is also highly recommended even though it may be a bit dated.