E300 Econometric Methods

Aims and Objectives
This module aims to provide an overview of basic econometric methods. The focus is on understanding and interpreting the econometric assumptions and techniques in light of actual empirical applications. Upon completion of this module, students should

- have a solid understanding of basic applied econometric methods
- be able to interpret and understand econometric research of others
- confidently use econometrics to analyse different kinds of economic data

Contents
This module covers the following topics
1. Ordinary Least Squares basics using matrix algebra notation
2. Finite sample and asymptotic inference in linear regression
3. Heteroskedasticity, Generalized Least Squares
4. Regression with time series data and serial correlation
5. Unit roots and cointegration
6. Maximum likelihood analysis, probit
7. Instrumental variables
8. Generalized Method of moments

Additional applied econometric topics are covered in S301 Applied Econometrics. A four-hour course on STATA software “STATA for dissertations” is optional but highly recommended.

Organization
The module consists of a lecture course with a total of 27 hours of lectures in Michaelmas term. In addition, there are 8 classes of 2 hours in Michaelmas term. The main purpose of these classes is to discuss the problem sets to get essential preparation for the exam.

Readings
Textbooks used for this module are

Detailed reading lists are provided in the lecture course outlines, which will be posted on the Moodle web site.

**Assessment**
The examination for this module consists of a three-hour written exam that takes place in May.