Schedule

PhD course in Econometrics, 15 ECTS credits, spring 2021

Linnaeus university, Växjö

All lectures are expected to be streamed live online, through Zoom. Apart from traditional white-board lectures, there will also be computer classes to ensure a strong connection to empirical econometric modelling.

We will be following the book *Econometric analysis: 8th Edition. W. H. Greene* closely throughout the course. The exam will consist of a number of home assignment involving theoretical matters as well as empirical analyses. Students who have not yet applied to the course should do this asap, directly to the course coordinator (see contact info below).

20/1, 09.00-12.00. Lecture 1. Introduction. Linear algebra. Stochastic limit theory. Lecturer: TH

21/1, 09.00-12.00. Lecture 2. Econometrics. The linear regression model. The least square estimator. Lecturer: TH

26/1, 09.00-12.00. Lecture 3. Hypothesis tests and model selection. Lecturer: TH.

2/2, 09.00-12.00. Lecture 4. Functional form and structural change. Lecturer: PK.

3/2, 09.00-12.00. Lecture 5. Nonlinear, semiparametric and nonparametric regression models. Lecturer: PK.

3/2, 13.00-16.00. Lecture 6. Endogeniety and instrumental variable estimation. Lecturer: PK.

24/2, 09.00-12.00. Lecture 7. The generalized regression model and heteroscedasticity. Systems of equations. Lecturer: PK.

25/2, 09.00-12.00. Lecture 8. Models for panel data. Lecturer: TH.

26/2, 09.00-12.00. Computer class 1. STATA exercises involving selected contents from lecture 2-8. Instructor: KT.

9/3, 09.00-12.00. Lecture 9. Estimation frameworks in econometrics. Minimum distance estimation and GMM. Lecturer: PK

10/3, 09.00-12.00. Lecture 10. High-dimensional data and methods for regularization. Lecturer: TH

11/3, 09.00-12.00. Lecture 11. Maximum likelihood estimation. Lecturer: PK

20/4, 09.00-12.00. Lecture 12. Simulation-based estimation and inference and random parameter models. Bayesian estimation and inference. Lecturer: TH

21/4. 09.00-12.00. Lecture 13. Discrete choices and event counts. Lecturer: HL.

22/4, 09.00-12.00. Lecture 14. Limited dependent variables, truncation, censoring, and sample selection. Lecturer: HL

4/5, 09.00-12.00. Lecture 15. Serial correlation: Lecturer TH

5/5, 09.00-12.00. Lecture 16. Nonstationary data. Lecturer TH

6/5, 09.00-12.00. Room K1056. Computer class 2. STATA exercises involving lecture 9-16. Instructor: KT.

Literature: Econometric analysis: 8th Edition. W. H. Greene. Pearson Int. ed.

Lecturers

Thomas Holgersson (thomas.holgersson@lnu.se). Course coordinator.

Håkan Locking (hakan.locking@lnu.se)

Peter Karlsson (peter.s.karlsson@lnu.se)

Computer classes

Khayyam Tayibov (khayyam.tayibov@lnu.se)