ECON4136 – Provisional Lecture Plan

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Course content

This course introduces core microeconometric methods and the principles of causal inference. We will cover instrumental variables, elementary panel data models, and limited dependent variable models. Causal inference and program evaluation methods will cover both experimental and quasi-experimental approaches.

The emphasis will be on developing a solid understanding of the underlying econometric principles of the methods taught, as well as on their empirical application.

Students will also be introduced to statistical computing with Stata, a statistical package for data analysis, data management, and graphics

Learning outcomes

Knowledge outcomes:

The course develops knowledge of both the formal and practical aspects of important microeconometric methods. The successful student will be able to understand when to apply a method, how to apply this method and the method's limitations. This also covers model specification and being able to correctly interpret estimation results. Mastering the course's content will allow students to understand much of the applied microeconometric literature, and to perform basic econometric analyses themselves.

Skills:

Basic skills in using Stata in performing various analyses on economic data will be developed through exercises and examples in the textbook. Students are supposed to be able to interpret Stata output.

Literature

Jeffrey M. Wooldridge, Econometric Analysis of Cross Section and Panel Data, 2nd Edition.
Chapters 4, 5, 10, 13, 15, 16, 17, 20, 21
+ Handouts

Prerequisites

Econ 4150 or equivalent. Statistics 2 or equivalent recommended.

Exam

A 3-hour written school exam.

Exam resources

Open-book exam, where all written and printed resources are allowed. A calculator is recommended.

Lectures

Lecture 1 — Ordinary Least Squares

Lecture 2-3 — Instrumental Variables

Lecture 4 — Basic Panel Data Models

Lecture 5 — Experiments

Lecture 6/7 — Maximum Likelihood

Handout Tore Schweder (to be published on the ECON4136 webpage)

Lecture 8 — Binary Response Models

Lecture 9 — Multinomial and Ordered Response Models

Lecture 10 — Censoring & Truncation

Lecture 11 — Matching Methods

Lecture 13 — Difference-in-Differences

Lecture 12 — Regression Discontinuity Design