

Panel Data Analysis

Location: CIQSS, 3535 Queen-Mary, Suite 420, Montréal

Dates: June 27 - 30, 2016

Course objectives and content

This intensive training session deals with longitudinal (panel) data analysis. The course will cover topics in static and dynamic model specifications, as well as topics in duration data analysis. Emphasis will be placed both on theory and computer applications of the methods using data from the *National Longitudinal Survey of Youth*.

Part 1: Static panel data analysis

The first part of this course will introduce the concept of panel data and derive estimation methods suitable for this type of data in a static environment. Both linear and non-linear model specifications (such as Probit and Logit) will be considered. We will also discuss how to estimate causal effects using cross-sectional data and panel data.

Part 2: Dynamic panel data analysis

The second part of this course will introduce dynamic models (for example, models containing a lagged dependent variable) and describe appropriate estimation methods. As for static models, both linear and non-linear model specifications will be considered.

Part 3: Duration data analysis

The third part of this course will deal with continuous and discrete time duration data.

Eligibility

The course is open to graduate students and postdoctoral fellows as well as to professors and practising researchers. Participants should have some working knowledge of regression models prior to the course and a practical knowledge of a statistical package such as SAS, STATA or SPSS.

Trainer

This training session will be under the responsibility of Jorgen Hansen, Professor, Department of Economics, Concordia University.

General course information

The seminar is scheduled from **9:30am to 5:30pm**, June 27

The seminar is scheduled from **9:15am to 5:30pm**, June 28-30.

The sessions are in English. Morning sessions will be used for theoretical presentations and afternoon sessions will be reserved for computer exercises. The practical exercises will be given using SAS and STATA.

Schedule

Day 1 :

- Estimation of static, linear regression models in both cross-sectional data and panel data.
- Workshop: Exercise 1.

Day 2 :

- Estimation of static, non-linear models in both cross-sectional data and panel data
- Workshop: Exercise 2.

Day 3 :

- Estimation of dynamic models in panel data.
- Workshop: Exercise 3.

Day 4 :

- Estimation of duration data models
- Workshop: Exercise 4.

Main References

Cameron, Colin A. and Pravin K. Trivedi (2005) *Microeconometrics: Methods and Applications*. Cambridge University Press, New York, NY.

Cameron, Colin A. and Pravin K. Trivedi (2010) *Microeconometrics Using Stata*. Stata Press.