DRE 1009 Multilevel Analyses

Programme

Responsible for the course
Karl Gustaf Jøreskog

Department
Department of Economics

Term
According to study plan

ECTS Credits
6

Language of instruction
English

Introduction
Please note that this course will be revised before it is offered again
Multilevel analysis is the analysis of multilevel data where some observational units are nested within other observational units. For example, students are grouped in classes, classes are grouped in schools, and so on. Multilevel models, also called hierarchical linear models and their associated techniques take the inherent data into account in the analysis.
Lectures and Computer Exercises (30 hours).

Learning outcome
Students should learn the theory and practice of Multilevel Analysis so as to be able to carry out such analysis with LISREL on empirical data.

Prerequisites
Either DRE 1011 Quantitative Research Methods: Multivariate Statistics or DRE 1004 Multivariate Statistics.

Admission to a PhD Programme is a general requirement for participation in PhD courses at BI Norwegian Business School.

External candidates are kindly asked to attach confirmation of admission to a PhD programme when signing up for a course with the doctoral administration. Other candidates may be allowed to sit in on courses by approval of the courseleader. Sitting in on courses does not permit registration for courses, handing in exams or gaining credits for the course. Course certificates or conformation letters will not be issued for sitting in on courses

Compulsory reading
Books:
Bollen, Kenneth A. & Patrick J. Curran. 2006. Latent curve models : a structural equation perspective. Hoboken, N.J. : Wiley-Interscience
Snijders, T.A.B. and Roel J. Bosker. 1999. Multilevel analysis : an introduction to basic and advanced multilevel modeling. London : Sage

Recommended reading
Books:
Heck, Ronald H. & Scott L. Thomas. 2009. An introduction to multilevel modeling techniques. 2nd ed. New York : Routledge
Hox, J. J. 2010. Multilevel analysis : techniques and applications. 2nd ed. New York : Routledge. Ny utgave forventes juni 2010

Course outline
Importing data into LISREL and data management
Regression analysis and generalized linear models
Two- and three-level regression models
Multilevel models with categorical outcomes
Multilevel models for longitudinal data
Latent curve models

Computer-based tools
LISREL, It's learning / homepage

Learning process and workload
Workload

Lectures and computer exercises	30 hours
Specified learning activities	80 hours
Autonomous student learning	50 hours
Three class presentations	3 hours
Total	163 hours

Examination
Termpaper.
The paper should be original work, and be written specifically for this course. The course will be graded pass / fail

Examination code(s)
DRE 10092 accounts for 100% of the grade.

Examination support materials

Re-sit examination
Re-takes are only possible at the next time a course will be held. When the course evaluation has a separate exam code for each part of the evaluation it is possible to retake parts of the evaluation. Otherwise, the whole course must be re-evaluated when a student wants to retake an exam.

Additional information
Honour Code
Academic honesty and trust are important to all of us as individuals, and represent values that are encouraged and promoted by the honour code system. This is a most significant university tradition. Students are responsible for familiarizing themselves with the ideals of the honour code system, to which the faculty are also deeply committed.

Any violation of the honour code will be dealt with in accordance with BI's procedures for cheating. These issues are a serious matter to everyone associated with the programs at BI and are at the heart of the honor code and academy integrity. If you have any questions about your responsibilities under the honour code, please ask.