Linear Mixed Models for Incomplete Longitudinal Data
Linjära blandmodeller för longitudinellt data med bortfall

Credit points: 7.5
Course code:
Responsible department: Department of Statistics, Umeå school of Business and Economics
Main field of study: Statistics
Level: Advanced level
Specialisation in relation to degree requirements:
Subject area: Statistics
Grading scale: G Pass, U fail

Confirmation
This course syllabus has been confirmed by the head of the department and is valid from 2012-10-16.

Contents
The course provides both theoretical and applied introduction to multilevel/hierarchical models and their use for incomplete data cases. Applications are made with a suitable Statistical computing program.

Expected learning outcomes
After completing the course, the student should:
- Be able to understand and describe different linear mixed models and their use for incomplete data situations (e.g. ignorable and non-ignorable drop out).
- Be able to analyse longitudinal data (possibly incomplete) using appropriate statistical models with suitable statistical computing software.
- Be able to use linear mixed model fits to make predictions and inferences about quantities of interest.

Required knowledge
75 HP in statistics and/or mathematical statistics, or equivalent knowledge.

Form of instruction
The course is given as a reading course where the students work active with presentations of the content of the course book and hands in written presentations.
**Examination modes**
The examination consists of oral and written presentations.

**Academic credit transfer**
Crediting previous courses is examined individually. For more information see Umeå University’s collection of rules.

**References**


