



Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

SLUkurs

Syllabus

PNS0018 Growth curve analysis, 6.0 credits

Syllabus approved

2005-02-15

Subjects

Statistics, Computer Science and Systems Science

Education cycle

Third cycle

Grading scale

Pass / Failed

The requirements for attaining different grades are described in the course assessment criteria which are contained in a supplement to the course syllabus. Current information on assessment criteria shall be made available at the start of the course.

Language

English

Prior knowledge

Some regression analysis and some matrix theory.

Objective, including learning outcomes

Statistical inference and growth curve analysis.

Content

Regression analysis, growth curves analysis, repeated measurements analysis, analysis in the Potthoff & Roy model, analysis in sum of profiles models, testing certain covariance structures, MANOVA, GMANOVA, split-plot analysis, random coefficient regression.

Requirements for examination

Home assignments.

Additional information

Growth curve and repeated measurements models are statistical methods often used in the analysis of experiments which are designed so that the same experimental units are observed repeatedly. Experiments of this type have a broad application, especially in the life and social sciences. As examples, most clinical trials of new pharmaceutical drugs and many agronomical studies are characterized by repeated sampling over time of the experimental units. While several "classical" statistical methods exist, the application of these methods without regard to the underlying assumptions is common. The purpose with the course is to clarify and present several techniques for studying repeated measures data.

Responsible department

Department of Energy and Technology