



Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

SLUkurs

Syllabus

PFG0042 Applied logistic regression, 7.5 credits

Syllabus approved

2012-10-18

Subjects

Mathematic Statistics

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

Knowledge of basic concepts of probability theory and statistics and a background in regression analysis is assumed

Objective, including learning outcomes

The main goal of the course is to give the participants a profound introduction to the logistic regression model and its applications. Logistic regression is a standard

method for regression analysis of categorical outcome data. The aim is to find a reasonable model for describing the relationship between a categorical response variable and a set of independent explanatory variables.

A participant who has completed the course shall be able to fit logistic regression models to practical data sets and interpret a fitted logistic regression model. On completion of the course, the student is expected to have basic knowledge in model-building and model evaluation methods for logistic regression.

Content

- Introduction to the logistic regression model, binomial logistic regression
- Multiple logistic regression
- Interpretation of the fitted logistic regression model
- Model-building strategies and methods for logistic regression
- Assessing the fit of the model
- Multinomial logistic regression

Requirements for examination

Home assignments and a data analysis assignment with an oral presentation at the end of the course.

Additional information

The course is delivered through a combination of lectures and computer exercises. The statistical software R is used in computer exercises. The course will only be given if the number of participants is at least 5.

Responsible department

Department of Forest Economics