

SLUkurs

Syllabus

PFS0174 Statistics IV: Generalized Linear Models, 4.0 credits

Syllabus approved

2020-03-05

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

Statistics III: Regression Analysis or equivalent.

Objective, including learning outcomes

The objective of the course is to give an overview of generalized linear models. On completion of the course, the student will be able to:

- specify generalized linear models including conditions and assumptions

- select an appropriate linear model for a given problem
- carry out an analysis based on a generalized linear model in the statistical software R
- interpret and evaluate results correctly and draw reasonable conclusions
- clearly and concisely communicate results and conclusions

Content

The course will cover the following topics:

- Binomial and multinomial logistic regression
- Poisson regression
- Overdispersion and zero-inflation.
- Generalized linear models and generalized linear mixed models.

Requirements for examination

Passed examination in written and/or oral form.

Additional information

Responsible department

Department of Forest Resource Management