



SLUkurs

Syllabus

PNS0178 Statistics I: Basic Statistics, 4.0 credits

Syllabus approved

2019-03-08

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

None

Objective, including learning outcomes

The objective of the course is to give an introduction to basic probability theory and statistical inference. On completion of the course, the student will be able to:

- apply basic probability concepts and statistical principles and formulate a

problem in statistical terms

- describe common statistical methods including conditions and assumptions
- select an appropriate statistical method for a given problem
- carry out a basic statistical analysis in the statistical software R or SAS
- interpret and evaluate results correctly and draw reasonable conclusions
- clearly and concisely communicate results and conclusions

Content

The course is built on lectures and computer exercises. The main components are as follows:

- Descriptive statistics.
- Basic probability theory.
- Probability distributions.
- Statistical inference of means and proportions, one and two samples.
- Nonparametric methods.
- Analysis of frequency data.

Requirements for examination

Requirements for examination:

Passed exercises and passed examination in written and/or oral form.

Additional information

Responsible department

Department of Energy and Technology