Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

SLUkurs

Syllabus

PNS0102 Statistics I: Basic Statistics, 4.0 credits

Syllabus approved

2013-07-05

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

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:

- use basic probability concepts and statistical principles

- formulate a problem in statistical terms
- describe common statistical methods including conditions and assumptions
- apply basic statistical methods in scientific research
- select an appropriate statistical method for a given problem
- carry out a basic statistical analysis
- interpret and evaluate results correctly and draw reasonable conclusions
- clearly and concisely communicate results and conclusions
- use statistical software for analysis

Content

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

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

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