

## Statistics

Statistik  
11 credits

Programme course

732G81

Valid from: 2010 Autumn semester

<b>Determined by</b>	<b>Main field of study</b>	
The Quality Board at the Faculty of Arts and Sciences	Statistics	
<b>Date determined</b>	<b>Course level</b>	<b>Progressive specialisation</b>
2008-11-12	First cycle	G1N
<b>Revised by</b>	<b>Disciplinary domain</b>	
	Social sciences	
<b>Revision date</b>	<b>Subject group</b>	
	Statistics	
<b>Offered first time</b>	<b>Offered for the last time</b>	
Autumn semester 2008		
<b>Department</b>	<b>Replaced by</b>	
Institutionen för datavetenskap		

## Course offered for

- Business and Economics Programme - International - French
- Business and Economics Programme - International - Spanish
- Business and Economics Programme - International - German
- Business and Economics Programme - International - English

## Entry requirements

General entry requirements for undergraduate studies  
and

Social Studies, English, and Mathematics corresponding to the level of Swedish upper secondary education (Samhällskunskap 1b or 1a1 and 1a2, Engelska 6, and Matematik 3b/3c or Matematik C)

## Intended learning outcomes

On completion of the course, the student should be able to:

- collect data via an independently developed questionnaire and describe and analyse the data by means of basic statistical methods,
- demonstrate statistical inference,
- carry out both estimation and test of hypotheses of means and proportions,
- assess the quality of collected data and inferences and carry out simple statistical analyses.

## Course content

The aim of the course is that the student should acquire a constructive critical approach to quantitative data and knowledge of fundamental statistical concepts and methods. An additional aim of the course is that the student should develop an ability to handle data with and without the help of a computer.

The theoretical part of the course covers the following areas:

- descriptive statistics,
- descriptive measures,
- tables and diagrams, the table analysis and standard weighting,
- the basics of probability theory,
- sampling methods,
- statistical inference,
- point and interval estimation,
- hypothesis testing with z and t methods,
- chi-square test,
- simple linear regression,
- computer exercises.

The course also includes a project work

## Teaching and working methods

Apart from self-study, the teaching consists of lectures and teaching sessions, as well as computer exercises, supervision and seminars in connection with the project. The students should also study independently.

## Examination

The course is examined through a written examination and through project work. Participation in project seminars is compulsory. The examination also includes completion of computer exercises, which are preceded by one or more tests.

If special circumstances prevail, and if it is possible with consideration of the nature of the compulsory component, the examiner may decide to replace the compulsory component with another equivalent component.

If the LiU coordinator for students with disabilities has granted a student the right to an adapted examination for a written examination in an examination hall, the student has the right to it.

If the coordinator has recommended for the student an adapted examination or alternative form of examination, the examiner may grant this if the examiner assesses that it is possible, based on consideration of the course objectives.

An examiner may also decide that an adapted examination or alternative form of examination if the examiner assessed that special circumstances prevail, and the examiner assesses that it is possible while maintaining the objectives of the course.

Students failing an exam covering either the entire course or part of the course twice are entitled to have a new examiner appointed for the reexamination.

Students who have passed an examination may not retake it in order to improve their grades.

## Grades

Three-grade scale, U, G, VG

## Other information

Planning and implementation of a course must take its starting point in the wording of the syllabus. The course evaluation included in each course must therefore take up the question how well the course agrees with the syllabus. The course is carried out in such a way that both men's and women's experience and knowledge is made visible and developed.

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If special circumstances prevail, the vice-chancellor may in a special decision specify the preconditions for temporary deviations from this course syllabus, and delegate the right to take such decisions.