



Course syllabus

School of Business and Economics

Department of Economics and Statistics

1ST401 Statistik, 7,5 högskolepoäng

Statistics, 7.5 credits

Main field of study

Statistics

Subject Group

Statistics

Level of classification

First Level

Progression

G1N

Date of Ratification

Approved by School of Business and Economics 2018-06-14

The course syllabus is valid from spring semester 2019

Prerequisites

General entry requirements and Civics 1b / 1a1 +1a2, Mathematics 2a / 2b / 2c or Civics A, Mathematics B (Field-specific entry requirements 5/A5). English 6/B or the equivalent. ****

Objectives

After completing the course the student is expected to be able to:

- discuss the role of centrality measures vs measures of spread
- state the difference between point estimates and interval estimates
- explain the concept of random samples
- explain the duality between hypothesis tests and confidence intervals
- discuss the meaning- and use of the central limit theorem
- use SPSS to: present and summarise data graphically, calculate elementary probabilities, test statistical hypotheses concerning measures of centrality

Content

The course contains:

- descriptive statistics
- probability
- random variables
- the normal distribution
- sampling and sampling distributions
- confidence intervals,
- hypothesis testings
- practical examples from retail application areas
- statistical data processing with SPSS

Type of Instruction

The teaching consists of computer classes and lectures. Mandatory parts are stated in the schedule.

Examination

The course is assessed with the grades A, B, C, D, E, Fx or F.

The course is examined through a an individual written exam and a written report.

The grade A constitutes the highest grade on the scale and the remaining grades follow in descending order where the grade E is the lowest grade on the scale that will result in a pass. The grade F means that the student's performance is assessed as fail.

After each regular examination there will be at least one new examination in close proximity to the date the results of the regular exam were posted. Students who are close to the passing grade of reports can complement after instructions and time-frame given by the examiner to obtain a pass grade.

Grading criteria for the A–F scale are communicated in writing to the student by the start of the course at the latest.

Course Evaluation

During the implementation of the course or in close connection to the course a course evaluation is to be carried out. Result and analysis of the course evaluation is to be presented as feedback both to the students who have completed the course and to the students who are to participate on the course the next time it is offered. The course evaluation is to be carried out anonymously.

Credit Overlap

The course cannot be included in a degree along with the following courses of which the content fully, or partly, corresponds to the content of this course: The course overlaps 1ST512 module 1 7.5 credits

Required Reading and Additional Study Material

Required reading

Moore, D., McCabe, G., Craig, B. *Introduction to the practice of statistics*. Macmillan Learning. Latest edition. About 810 pages.

SPSS online manual (electronic)