

Syllabus

for course at advanced level

Experimental Design
Försöksplanering

7.5 Higher Education
Credits
7.5 ECTS credits

Course code:	ST423A
Valid from:	Autumn 2010
Date of approval:	2010-05-19
Department	Department of Statistics
Main field:	Statistics
Specialisation:	A1N - Second cycle, has only first-cycle course/s as entry requirements

Decision

This syllabus was approved by the Board of the Department of Statistics on May 23, 2007.

Prerequisites and special admittance requirements

90 ECTS credits in Statistics or equivalent and Swedish upper secondary school course English B or equivalent.

Course structure

Examination code	Name	Higher Education Credits
11FE	Design of Experiments	7.5

Course content

Experiments are used in social sciences as well as economics, science, technology, and medicine. The aim of this course is to give basic knowledge in design of experiments and analysis of data from experiments. Experiments considered in the course include one factor experiments, randomized blocks, Latin squares, 2k-factorial experiments, and split plot experiments. The theory presented is exemplified with a large number of applications.

Learning outcomes

After completing the course, students should be able to:

- describe the basic methods for designing experiments
- analyse data generated by factorial experiments by using analysis of variance

Education

Teaching forms may consist of lectures, exercises, seminars, computer sessions and tutoring. Some compulsory attendance and other mandatory elements may occur.

Forms of examination

a. Examination will be done by measuring the knowledge of the learning outcomes. Examination will comprise written tests and written reports of one individual compulsory exercise and one group compulsory exercise.

b. Grading is done according to a 7-point scale related to the specified learning outcomes:

A = Excellent

B = Very Good

C = Good

D = Satisfactory

E = Sufficient

Fx = Insufficient

F = Completely insufficient

c. Grading criteria will be distributed at the beginning of the course.

d. To pass the entire course, a minimum grade of E is required.

e. Students who have received the grade Fx or F on an examination are entitled to at least four additional examinations to achieve the lowest grade E as long as the course is given.

Students who have received the grade E on an examination may not retake this examination in order to attempt to achieve a higher grade.

Students who have received the grade Fx or F on an examination on two occasions by the same examiner have the right to request that a different examiner be appointed to set the grade of the examination. Such a request must be in writing and sent to the head of the department.

Here, the term examination denotes all compulsory elements of the course.

Interim

Students can request examination in accordance with this syllabus up to three times during a period of two years after the course is no longer given. Such a request must be in writing and sent to the head of the department.

Here, the term examination denotes all compulsory elements of the course.

Required reading

The course literature is described in an appendix to the syllabus.