Department of Mathematics
(incl. Math. Statistics)

Stockholm University

Syllabus

for course at advanced level

Selected Topics in Probability Theory and Stochastic Processes
Valda ämnen i sannolikhetsteori och stokastiska processer

7.5 Higher Education Credits
7.5 ECTS credits

Course code:	MT7031
Valid from:	Autumn 2019
Date of approval:	2013-01-14
Changed:	2013-01-14
Department	Department of Mathematics (incl. Math. Statistics)
Main field:	Mathematical Statistics
Specialisation:	A1N - Second cycle, has only first-cycle course/s as entry requirements

Decision

This syllabus has been approved by the Board of the Faculty of Science at Stockholm University 2013-01-14 and has been revised 2019-04-26.

Prerequisites and special admittance requirements

Bachelor degree in mathematical statistics or the equivalent. English B or the equivalent.

Course structure

Examination code	Name	Higher Education Credits
HELA	Selected Topics - Probability Theory, Stochastic processes	7.5

Course content

The contents of the course varies between teaching occasions, depending on the availability of instructors. In general the course should cover important and topical research topics within probability theory and stochastic processes.

Learning outcomes

This course deepens the level of knowledge within a discipline of probability theory and stochastic processes. After completion of the course the student is expected to:

- have acquired a deepened understanding of probability theory and stochastic processes,
- have deepend the knowledge of methods used in probability theory and stochastic processes
- have an ability to critically review and analyze topics within probability theory and stochastic processes.

Education

The education consists of lectures and exercise sessions.

Forms of examination

a. Examination for the course is in the following manner: measurement of knowledge takes place through written examination and hand-in assignments.

b. Grading is carried out according to a 7-point scale related to learning objectives:

A = Excellent
B = Very Good
C = Good
D = Satisfactory
E = Sufficient
Fx = Fail (some more work is required)
F = Fail (a lot more work is required)

c. Grading criteria for the course will be distributed at the start of the course.

d. A minimum grade of E is required to pass the course

e. Students who fail to achieve a pass grade in an ordinary examination have the right to take additional examinations, as long as the course is given. The number of examintions is not limited. The term "examination" here is used to denote also other compulsory elements of the course. Students who have achieved a pass grade on an examination may not retake this examination in order to attempt to achieve a higher grade. Students who have failed to reach a pass grade on two occasions have the right to request that a different teacher be appointed to set the grade of the course. A request for such appointment must be sent to the departmental board. The course has at least two examinations for each academic year in the years in which instruction is provided. Intervening years include at least one examination.

f. An opportunity to make up from grade Fx to the grade E is not given for this course.

Interim

Students may request that the examination is carried out in accordance with this syllabus even after it has ceased to apply. This right is limited, however, to a maximum of three occasions during a two-year-period after the end of giving the course. A request for such examination must be sent to the departmental board.

Required reading

Course literature is decided by the departmental board and is described in an appendix to the syllabus.