Course Programme MSF200/MVE330 Stochastic Processes 3rd quarter Spring 2010, 7.5 credits

Teacher and Examiner. Patrik Albin, room 3072 Mathematical Sciences, telephone 031 772 3512, email palbin@chalmers.se

Responsible University Unit. Department of Mathematical Statistics, Mathematical Sciences, Chalmers Tvärgata 3. Expedition: Monday-Friday, 8.30 am - 1 pm.

Literature. Sections 6.1-6.4, 6.8-6.9, 6.11, 8.1-8.5, 9.1-9.6, 10.1-10.5, 11.1-11.6 and 12.1-12.8 in *Grimmett and Stirzaker: Probability and Random Processes, 3rd Ed., 2001*, which should cost around 500 SEK (see e.g., Bokus). Additional lecture notes authored by myself.

Language. The course is given in english.

Examination is by means of hand-ins: Each student should do one exercise from each of the above indicated 37 sections in the book, except for Sections 8.1 and 9.4, for which no exercises are required, and Section 9.6, for which two exercises are required. Thus a total of 36 hand-in exercises. Exercises should be selected from the book (either from the exercises ending each section or from the concluding problem section of each chapter), or from the exercises indicated in my lecture notes.

The hand-ins are given to me in person, sent to me by email, or dropped in a certain hand-in basket outside my office. (Please make back-up copies of your hand-ins to be on the safe side!) Students can do the hand-ins in pairs if they like that (this can often be mutually benecicial for both students in the pair). The are no formal deadline dates for hand-ins.

In addition to the hand-ins there will be a final individual oral exam (which must also be passed) the only purpose of which is to check that students have knowledge that make it reasonable to assume that they really have obtained the solutions to the hand-ins by their own work.

Students are always welcome to discuss the exercises (or other things having to do with the course) with myself, in person or by email enquiries. The grades on the course will be based on the quality of the hand-ins (when the oral exam has been passed).

Admission and Registration. Students that have not been admitted to the course or registered for it are very welcome anyway! Advice on how to register will be offered by Patrik at the lectures.

Lectures. Thursdays and Fridays 3.15-5 pm in Room MVH:11 of the Mathematical Sciences building during the 3:rd quarter, starting first week of the spring semester Thursday 21 January/Friday 22 January and ending first week of the month of March Thursday 4 March/Friday 5 March. (It might happen that one or two of the Thursday lectures will be moved to other times.)

Schedule	Programme
Lecture 1	Sections 6.1-6.2
Lecture 2	Sections 6.3-6.4
Lecture 3	Sections 6.8-6.9 and 6.11
Lecture 4	Sections 8.1-8.5
Lecture 5	Sections 9.1-9.3
Lecture 6	Sections 9.4-9.5
Lecture 7	Sections 9.6
Lecture 8	Sections 10.1-10.3
Lecture 9	Sections 10.4-10.5
Lecture 10	Sections 11.1-11.3
Lecture 11	Sections 11.4-11.6
Lecture 12	Sections 12.1-12.4
Lecture 13	Sections 12.5-12.8
Lecture 14	Reserve