

Course Programme TMS170/MSA360 Stochastic Calculus Part II, 7.5 credits, 2nd quarter Fall 2008

Responsible Teacher. Patrik Albin (lectures), room L3072 Mathematica Sciences, tel. 772 3512, email palbin@math.chalmers.se

Other Teachers. Mattias Sundén (exercises and examination of hand-ins), room L3071, email mattib@math.chalmers.se, tel. 772 8294.

Course www-page. <http://www.math.chalmers.se/Stat/Grundutb/CTH/tms170/0809/>

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

Literature. *Fima C. Klebaner: Introduction to Stochastic Calculus with Applications, 2nd Ed.* available from Cremona Chalmer's bookshop.

Additional lecture notes on applications and modelling will be distributed during lectures. Both exercise sessions and hand-ins involve practical modelling tasks. See also the course www-page.

Language. The course is given in english.

Content of Course. Chapters 6-14 in Klebaner's book. Additional lecture notes on applications and modelling are distributed during the course.

Examination is handled by Mattias Sundén (albeit Patrik is the formal examiner) through hand-ins, see the course www-page. Help with the hand-ins is offered by Mattias.

Upon request there it is possible to pass the course by doing a single greater project suited to the students particular interests. Typically this can be used as a preparation for a master's thesis project (not necessarily with Patrik as advisor). Please contact Patrik for more information.

It is an outspoken intention that every student that is reasonably well prepared and reasonably well motivated should have a lot of positive things to get from the course. All such students should also pass the examination. If in doubt about anything of this, please contact Patrik.

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. According to the following scheme in room MVF:31.

Schedule	Day	Programme
Lecture 1	Thursday 30 October 1.15 pm	Chapter 6 in Klebaner
Lecture 2	Monday 3 November 3.15 pm	Chapter 6 in Klebaner
Lecture 3	Tuesday 4 November 3.15 pm	Chapters 6-7 in Klebaner
Lecture 4	Monday 10 November 3.15 pm	Chapter 7 in Klebaner
Lecture 5	Tuesday 11 November 3.15 pm	Chapters 7 in Klebaner
Lecture 6	Monday 17 November 3.15 pm	Chapter 8 in Klebaner
Lecture 7	Tuesday 18 November 3.15 pm	Chapter 8 in Klebaner
Lecture 8	Monday 24 November 3.15 pm	Chapter 8 in Klebaner
Lecture 9	Tuesday 25 November 3.15 pm	Chapter 8 in Klebaner
Lecture 10	Monday 1 December 3.15 pm	Chapters 9 in Klebaner
Lecture 11	Tuesday 2 December 3.15 pm	Chapter 9-10 in Klebaner
Lecture 12	Monday 8 December 3.15 pm	Chapter 10 in Klebaner
Lecture 13	Tuesday 9 December 3.15 pm	Applications/Modelling

Exercises. Thursdays 1.15-3 pm in room MVF:31 starting Thursday 6 November. Exercises from Klebaner's book will be used together with additional exercises distributed by Mattias. See the course www-page.

