

Course Programme TMS165/MSA350 Stochastic Calculus Part I, 7.5 credits, 1st quarter Fall 2008

Responsible Teacher. Patrik Albin (Lectures 1-11), room L3072 Mathematica Sciences, email palbin@math.chalmers.se, tel. 31 772 3512.

Other Teachers. Stig Larsson (Lectures 12-13), room L2078, email stig@math.chalmers.se, tel. 31 772 3543. Johan Tykesson (exercise sessions and examination of hand-ins), room L3088, email johant@math.chalmers.se, tel. 31 772 5374.

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, Second Edition 2005*, available from Cremona Chalmer's bookshop.

Additional lecture notes on applications (Lecture 11) and on numerical methods (Lectures 12-13) will be distributed during lectures. Additional exercises to those in Klebaner's book will be distributed during exercise sessions. See also the course www-page.

Language. The course is given in english.

Content of Course. Chapters 1-5 in Klebaner's book. Additional notes on numerical methods.

Examination is handled by Johan Tykesson (albeit Patrik is the formal examiner) through hand-ins, see the course www-page. Help with the hand-ins is offered by Johan. The grades on the course will be based on the quality of the hand-ins.

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. Room MVF:31, Mathematical Sciences, starting Friday 5 September.

Schedule	Day	Programme
Lecture 1	Friday 5 September	Chapter 1 in Klebaner's book
Lecture 2	Monday 8 September	Chapter 2 in Klebaner's book
Lecture 3	Wednesday 10 September	Chapter 2 in Klebaner's book
Lecture 4	Monday 15 September	Chapter 3 in Klebaner's book
Lecture 5	Wednesday 17 September	Chapter 3 in Klebaner's book
Lecture 6	Monday 22 September	Chapter 3 in Klebaner's book
Lecture 7	Wednesday 24 September	Chapter 4 in Klebaner's book
Lecture 8	Monday 29 September	Chapter 4 in Klebaner's book
Lecture 9	Wednesday 1 October	Chapter 5 in Klebaner's book
Lecture 10	Monday 6 October	Chapter 5 in Klebaner's book
Lecture 11	Wednesday 8 October	Applications
Lecture 12	Monday 13 October	Numerical methods
Lecture 13	Wednesday 15 October	Numerical methods

Exercises. Room MVF:31, Mathematical Sciences, Fridays 3.15-5 pm starting Friday 12 September. A separate programme for the exercises will be distributed by Johan. Exercises from Klebaner's book will be used together with additional exercises that are distributed by Johan. See also the course www-page.

