Course Programme TMS165/MSA350GU Stochastic Calculus Part I, 7.5 credits, 1st quarter Fall 2007

Responsible Teacher. Patrik Albin (Lectures 1-11), room 3072 Mathematica Sciences, email palbin@math.chalmers.se, tel. 31 772 3512.

Other Teachers. Stig Larsson (Lectures 12-13), room 2078, email stig@math.chalmers.se, tel. 31 772 3543. Daniel Ahlberg (exercise sessions and examination of hand-ins), room 3070, email md1ahlda@math.chalmers.se, tel. 31 772 5379.

Responsible University Unit. Department of mathematical Statistics, Mathematica Sciences, Chalmers Tvärgata 3. Expedition: see the www-pages of the department.

Literature. *Fima C. Klebaner: Introduction to Stochastic Calculus with Applications, Second Edition 2005*, available from Cremona Chalmer's bookshop.

Additional notes on numerical methods will be distributed during lectures. Additional exercises to those in Klebaner's book will be distributed during exercise sessions.

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 Daniel Ahlberg (albeit Patrik is the formal examiner) through hand-ins. Help with the hand-ins is offered by Daniel. 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, Math Sciences, Mondays 3.15-5 pm and Wednesdays 10-11.45 am.

Schedule	Day	Programme
Lecture 1	Wednesday 5 September	Chapter 1 in Klebaner's book
Lecture 2	Monday 10 September	Chapter 2 in Klebaner's book
Lecture 3	Wednesday 12 September	Chapter 2 in Klebaner's book
Lecture 4	Monday 17 September	Chapter 3 in Klebaner's book
Lecture 5	Wednesday 19 September	Chapter 3 in Klebaner's book
Lecture 6	Monday 24 September	Chapter 3 in Klebaner's book
Lecture 7	Wednesday 26 September	Chapter 4 in Klebaner's book
Lecture 8	Monday 1 October	Chapter 4 in Klebaner's book
Lecture 9	Wednesday 3 October	Chapter 5 in Klebaner's book
Lecture 10	Monday 8 October	Chapter 5 in Klebaner's book
Lecture 11	Wednesday 10 October	Applications
Lecture 12	Monday 15 October	Numerical methods
Lecture 13	Wednesday 17 October	Numerical methods

Exercises. Room MVF:31, Mathematical Sciences, Fridays 3.15-5 pm.

A separate programme for the exercises will be distributed by Daniel. Exercises from Klebaner's book will be used together with additional exercises that are distributed.