Course Programme TMS165/MSA350 Stochastic Calculus Part I, 7.5 credits, 1st quarter Fall 2010

Responsible teacher. Patrik Albin (Lectures 1-11 and 14), room L3072 Mathematica Sciences, email `palbin @ chalmers.se`, tel. 31 772 3512.

Other teachers. Stig Larsson (Lectures 12-13), room L2078, email `stig @ chalmers.se`, tel. 31 772 3543. Krzysztof Bartoszek (exercise sessions and examination of hand-ins), room L3098, email `krzbar @ chalmers.se`, tel. 31 772 5380.

Course web-page. `http://www.math.chalmers.se/Stat/Grundutb/CTH/tms165/1011/`

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. Lecture notes on numerical methods and lecture notes on applications available through the course web-page.

Content of course. Selection of material from Chapters 1-6 and 10 in Klebaner's book. Details of the selction will be available from the course web-page. Lecture notes on numerical methods. Lecture notes on applications. The course is given in english.

Examination of hand-ins is handled by Krzysztof Bartoszek (albeit Patrik is the formal examiner), see the course web-page. Help with the hand-ins is offered by Krzysztof. The grades on the course will be based on the quality of the hand-ins. Electronically submitted hand-ins (by email to Krzysztof) are recomended. Non-electronical submissions must be in duplicate.

In addition to the hand-ins there is a written exam Tuesday 19 October am. The purpose of the written exam is to check that students have worked properly with the hand-ins (i.e., not just copied them from some other student). Every student that have solved the hand-ins themselves should easily pass the written exam (which does not affect grades when it is OK). There will be new opportunities to written exams 13 January am 2011 as well as 27 April am 2011.

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	Day	Time and place	Programme
Lecture 1	Monday 30 August	3.15-5 pm in MVF33	Ch. 1 in Klebaner's book
Lecture 2	Wednesday 1 September	3.15-5 pm in MVF33	Ch. 1-2 in Klebaner's book
Lecture 3	Monday 6 September	3.15-5 pm in MVF33	Ch. 2 in Klebaner's book
Lecture 4	Wednesday 8 September	3.15-5 pm in MVF33	Ch. 3 in Klebaner's book
Lecture 5	Monday 13 September	3.15-5 pm in MVF33	Ch. 3 in Klebaner's book
Lecture 6	Wednesday 15 September	3.15-5 pm in MVF33	Ch. 4 in Klebaner's book
Lecture 7	Monday 20 September	3.15-5 pm in MVF33	Ch. 4 in Klebaner's book
Lecture 8	Friday 24 September	3.15-5 pm in MVF33	Ch. 5 in Klebaner's book
Lecture 9	Monday 27 September	3.15-5 pm in MVF33	Ch. 5-6 in Klebaner's book
Lecture 10	Wednesday 29 September	3.15-5 pm in MVF33	Ch. 6-10 in Klebaner's book
Lecture 11	Monday 4 October	3.15-5 pm in MVF33	Ch. 10 in Klebaner's book
Lecture 12	Wednesday 6 October	3.15-5 pm in MVF33	Numerical methods
Lecture 13	Monday 11 October	3.15-5 pm in MVF33	Numerical methods
Lecture 14	Wednesday 13 October	Electronical lecture	Applications

Exercises are in room MVF33 Fridays 3.15-5 pm starting Friday 3 September. See also the course web-page for more information.