OPTIONS AND MATHEMATICS (3p) (CTH[TMA155]&GU[MAM690])

period 4, spring 2006

The master course "Options and Mathematics" gives an introduction to the Black-Scholes option pricing theory using previous mathematical knowledge in standard calculus (in one and several variables) and statistics/probability. The presentation is not based on measure theory or stochastic analysis.

At present we develop a textbook "Introduction to the Black-Scholes Theory", an early version of which can be purchased at the DC, Maskingränd, Chalmers, from week 11, 2006. The chapters in the book are titled: 1. The Dominance Principle. 2. The Binomial Model. 3. A Review of Basic Concepts in Probability. 4. Brownian Motion. 5. The Black-Scholes Option Pricing Theory. 6. Homogeneous Contracts and Bivariate Geometric Brownian Motion. 7. Dividend-Paying Stocks.

The course will start March 15 at 10 a.m. in room MVF31. We have a written examination May 20 (reexamination September 2). In a few weeks you will get more information on the homepages for the course:

http://www.math.chalmers.se/Math/Grundutb/CTH/tma155/ http://www.math.chalmers.se/Math/Grundutb/GU/MAM690/

Welcome to Options and Mathematics!

(Our second course on financial derivatives "Financial Derivatives and Stochastic Analysis" will start autumn 2006.)

Göteborg February 6, 2006 Christer Borell /teacher and examiner/ /phone: 712 35 53; e-mail: borell@math.chalmers.se/