



2008 Spring Course on Stochastic Finance in discrete and continuous time

April and May 2008

Prof. Tomas Björk

Professor at the Stockholm School of Economics
Course Coordinator

PART I – Discrete Time Stochastic Finance (12H) - 15th to 22nd April – João Duque

PART II – Continuous Time Stochastic Finance (44H) - 24th April to 15th May

Tomas Björk (Exerc. Raquel Gaspar)

PART III – Optimal Stopping (12H) 16th to 21st April - Raquel Gaspar

-
- The Course will take place at **Instituto Superior de Economia e Gestão**, Lisboa.
 - Participants can apply for **examination** in order to obtain a **diploma**.
 - Every participant will receive a **certificate of participation**.
-

Aims and scope: The object of this course is to provide an introduction to arbitrage theory in continuous time, in particular to pricing and hedging theory for financial derivatives.

Students that have successfully completed this course should be able to:

- Understand the notions of: arbitrage portfolio, self-financing portfolio, risk-neutral measure, static or dynamics hedging, market completeness;
- Derive the Black-Scholes model, as well as its standard extensions to include dividends or currency derivatives;
- Use the change of numeraire technique to simplify pricing expressions;
- Distinguish between futures and forward contracts and prices;
- Apply basic notions of optimal stopping times, in particular, concerning their use in American option pricing.

Registration (deadline 10 April; max 25 participants): In order to apply you need to go through **2 steps**:

- 1 - Send an e-mail to **Secretaria da Pós-Graduação** sgp@iseg.utl.pt with the following information:
 - Full name • E-mail address • Telephone number • Academic degree • Profession • Institution
- 2 - Pay the application fee. A cheque made payable to **Instituto Superior de Economia e Gestão** should be sent to:

Secretaria da Pós-Graduação
ISEG
Rua do Quelhas, 6
1200-781 Lisboa
Portugal

The Course Fees are:

	PART II - Prof. Tomas Björk	The whole course
Standard	1350 €	1500 €
Full-time students / university staff	450 €	500 €

Organisers: *Master of Mathematical Finance – Scientific and Pedagogical Committee*

Maria do Rosário Grossinho (head)
Onofre Simões
Raquel Gaspar