UCL Université catholique de Louvain

LACTU2070

2010-2011

STOCHASTIC FINANCE 1

5.0 credits	30.0 h	2q

Teacher(s) :	Devolder Pierre ;
Language :	Français
Place of the course	Louvain-la-Neuve
Main themes :	After a presentation of discrete financial models introducing basic financial concepts, the stochastic calculus in a Brownian environment is developed. Applications in option theory and term structure of interest rates are presented.
Aims :	The aim of this course is to provide students with basic skills in stochastic calculus and application to finance. At the end of the course, the students must be able to price simple derivative products on stocks and bonds and to use the concept of risk neutral pricing. *The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".*
Content :	Content The following topics will be developed: 1 Financial products 2. Discrete models 3. Stochastic calculus 4. Continuous time finance Methods In-class activities X0 Lectures X0 Exercices/PT At home activities X0 Exercices to prepare the lecture X0 Paper work
Other infos :	Evaluation : Class participation and oral examination, in French Support : Slides provided through icampus
Cycle and year of study :	> Master [120] in Mathematics > Master [120] in Mathematical Engineering > Master [120] in Actuarial Science > Master [120] in Statistics: General > Master of arts in Business engineering
Faculty or entity in charge:	LSBA