

5.0 credits	30.0 h	2q	This biannual course is taught on years 2014-2015, 2016-2017, ...

Teacher(s) :	Béreau Sophie ;
Language :	Anglais
Place of the course	Louvain-la-Neuve
Main themes :	We will start to investigate the basic concepts in a simple binomial model in discrete time before generalizing them to general dynamic markets in discrete time. Before extending the concepts to continuous time, we will introduce the main mathematical tools of stochastic calculus. We will analyze applications to pricing of options on stocks and on interest rates via change of numeraire techniques.
Aims :	The student will be able to master financial concepts related to modern asset pricing theory by arbitrage. This will allow him to get the knowledge necessary to evaluate most prices of financial derivatives on stock and in-terest rates. <i>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".</i>
Content :	We will present the main theoretical concepts and apply them in exercises to help for a better understanding.
Other infos :	The students should have basic knowledge in probability and statistics, mathematics, and finance. The evaluation will be an oral exam. The support is made of slides and exercises with their correc-tions.
Cycle and year of study :	> Master [60] in Economics : General > Master [120] in Economics: General > Master [120] in Economics: Econometrics
Faculty or entity in charge:	ECON