

LLSMS2100

## 2015-2016

## Advanced finance (in English)

5.0 credits

30.0 h

1q

Teacher(s) :	Béreau Sophie ; Iania Leonardo ; Iania Leonardo (compensates Béreau Sophie) ;				
Language :	Anglais				
Place of the course	Louvain-la-Neuve				
Main themes :	 Sep. 26 - Presentation and introduction  Oct. 03 - Preferences and attitude towards risk  Oct. 10 - Risk aversion and investment decisions  Oct. 17 - The Capital Asset Pricing Model (CAPM)  Oct. 24 - Arrow-Debreu pricing: Equilbrium vs. Arbitrage Pricing  Oct. 31 - The Martingale Measure  Nov. 07 - The Arbitrage Pricing Theory (APT)  Nov. 14 - Financial markets and financial data in practice  Nov. 21 - The CAPM in practice  Nov. 28 - Multi-factor models  Dec. 05 - The Efficient Market Hypothesis  Dec. 12 - Modeling volatility: ARCH/GARCH models  Dec. 19 - How to manage risk? The concept of Value at Risk (VaR)				
Aims :	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".				
Evaluation methods :	Evaluation The evaluation will rely on: 1. a continuous assessment based on two written assignments counting for 25% each, which leads to 50% of the final grade; 2. a closed-book exam counting for the other 50%				
Content :	Presentation of the course The course aims to provide both theoretical and empirical insights in the field of financial economics at an intermediate (i.e. Master's) level. It is divided into two parts of 6 lectures each. Theoretical aspects The first one deals with theoretical aspects of financial modeling in general. More specifically, it reviews in details the main two methodologies devoted to asset valuation which are: the equilibrium vs. the arbitrage approaches. Empirical aspects The second one focuses on a selection of empirical issues and tools devoted to testing the main predictions of theoretical models in practise. Important questions such as the validity of the CAPM or APT models, the accuracy of the EM hypothesis, the issue of asset price volatility or that of risk management will be treated on a "do-it-yourself" basis using R. As a whole, this class should provide the students with both the required material for LLSMS2016 - Asset Pricing (mostly section 1 on Theoretical aspects) and some useful tools that could be needed for the realization of their Master's thesis in Finance (section 2 on Empirical aspects).				

Université Catholique de Louvain - COURSES DESCRIPTION FOR 2015-2016 - LLSMS2100

<b>D</b> <sup>11</sup> <b>1</b>	Theoretical aspects				
Bibliography :	Reference:				
	- Danthine, JP., and J.B.Donaldson, (2012, forthcoming), Intermediate Financial Theory,				
	- Elsevier Academic Press, 3rd ed. [DD]				
	Empirical aspects				
	References:				
	- Cambell, J.Y., Lo, A.W. and A.C. MacKinlay (1997), The Econometrics of Financial Markets,				
	- Princeton University Press [CLM] - disponible à la bibliothèque BSPO				
	- Jondeau, E., SH. Poon and M. Rockinger (2007), Financial Modeling under Non-Gaussian Distributions, Springer Finance Series,				
	Springer-Verlag [JPR] - disponible en ligne à la bibliothèque de l'UCL				
Faculty or entity in charge:	CLSM				

Programmes / formations proposant cette unité d'enseignement (UE)						
Intitulé du programme	Sigle	Credits	Prerequis	Acquis d'apprentissage		
Master [120] in Business engineering	INGE2M	5	-	٩		
Master [120] in Business Engineering	INGM2M	5	-	¢		
Master [120] in Management	GEST2M	5	-	٩		
Master [120] in Management	GESM2M	5	-	٩		
Master [120] in Actuarial Science	ACTU2M	5	-	٩		