

5.0 credits	30.0 h	1q
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Teacher(s) :	Levasseur Michel ;
Language :	Français
Place of the course	Louvain-la-Neuve
Main themes :	The futures markets, the term structure of prices and hedging The options markets, hedging and use of the " Greeks "
Aims :	<p>The objective of the class is twofold. It is about:</p> <p>a) systemizing and enhancing students' knowledge in financial derivatives: characteristics of financial contracts (traded on organized markets) and uses for hedging purposes;</p> <p>b) motivating students for reading of documents published by the professional organizations in order to prepare professionals able to join specialized departments within banks;</p> <p><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></p>
Content :	<p>The first part of this course is devoted to the study of forward and futures contracts. At the beginning of these markets, only commodities were concerned (more especially agricultural products). We shall to study these contracts. Later, we shall have a careful look at the interets rate related contracts that are now the most active ones. The second part of the course is devoted to the options markets. They were introduced at the beginning of the seventies and concerned the common shares. The ways they are managed, their uses et the rules of an efficient portfolio management will be treated.</p> <p>1 Commodities futures markets : principles and organization the pit and the transations the clearing the delivery process the speculation</p> <p>2 The futures prices and the dynamic management of a portfolio backwardation, contango and basis the efficiency of a hedge futures markets and storage policy the arbitrage</p> <p>3 The basic uses of " notional futures " hedging in the context of rising interest rates hedging in the context of declining interest rates basis and efficiency of hedging cash and carry reverse cross hedging</p> <p>4 The dynamic management of notional futures contacts the characteristics of a notional contract the factor and the " cheapest " computing the hedge ratio with the duration measures computing the hedge ratio with the correlation measures</p> <p>5 The futures contracts on short term interest rates the characteristics of the indices (IMM E\$ 3months, EURIBOR 3 months,...) the cash settlement hedging interest rates charges hedging financial incomes the methods : strip hedge, rolling strip hedge, one-off hedge, ...</p> <p>6 The basic uses of options on stocks the characteristics of the contracts bullish uses, bearish uses, speculation on volatility hedging</p>

	<p>arbitrage and conversion</p> <p>7 The parity relationships  put - call spot parity  put - call forward parity</p> <p>8 The dynamic management of an option portfolio  use of the Black and Scholes model  the greeks : delta, gamma, theta, vega  the delta neutral positions  the top and bottom positions</p> <p>9 Introduction on exotic options  forward start options  chooser options  barrier options  lookback options  average options</p> <p>Content  The case for innovation  Innovation concepts  Case studies  Innovation financing  Innovation management processes</p> <p>Methods  In-class activities  X Lectures  X Exercices  At home activities</p> <p>X Readings to prepare the lecture  X Exercices to prepare the lecture  X Paper work</p>
<p>Other infos :</p>	<p>Prerequisites (ideally in terms of competencies)  Evaluation : Class participation and oral examination, in French or English  Support : Slides provided through icampus  References : Provided during the class</p> <p>Internationalisation  X international content (markets are highly standardized and spread on all the world)</p> <p>Corporate features  Skills  X writing skills  X team work  X individual autonomy  X critical thinking</p> <p>Techniques and tools for teaching and learning  X IT tools  X Internet work  X modelling  X quantitative methods</p>
<p>Cycle and year of study :</p>	<p><a href="#">&gt; Master [120] in Economics: General</a>  <a href="#">&gt; Master of arts in Business engineering</a>  <a href="#">&gt; Master [120] in Management</a></p>
<p>Faculty or entity in charge:</p>	<p>CLSM</p>