UCLouvain

## lecge1333

2017

## Game theory and information in economics

5 credits

30.0 h + 10.0 h

Q2

Teacher(s)	Davila Muro Julio ;			
Language :	English			
Place of the course	Louvain-la-Neuve			
Main themes	The first part of the course provides the basis of decision theory and game theory. The second part is devoted to the economy of uncertainty. The third part is devoted to the Information Economy			
Aims	This course is designed for students of the orientation of the economy Bac ECGE (BAC3) who want to deepen the analysis of economic problems associated with uncertainty and information based on the tools of decision theory and games. The themes of uncertainty and information are vast. We chose to address the most important during the first ten weeks. We suggest a range of topics of interest for weeks: each year, specific topics will be treated according to the needs and tastes of students attending the course. An initial list of topics of interest is suggested. At the end of the course, students will master the theory of games used in the uncertain economy and information and be able to apply to economic problems in concrete they are relevant as tools for analysis and decision support.			
	can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".			
Content	Introduction Part I: Theory of individual decision and risk facing the games incomplete information 1. The theory of expected value of utility 2. Games strategic balance and normal Nash 3. Games strategic semi-normal balance bayesien Part II: Economics of uncertainty and applications 1. Measures of risk and risk aversion 2. Theory of insurance 3. Portfolio Theory Part III: Economics of Information and applications 1. Introduction to the theory of contracts 2. Problems of information theory auctions 3. Problems of information theory of insurance			
Other infos	Rating: a written examination at the end of the semester Support : According to the chosen themes of the chapters will be borrowed from the following books: BINMORE, K. , Jeux et théorie des jeux , De Boeck Université, 1999 EECKHOUDT, L. et C. GOLLIER, Les risques financiers : évaluation, gestion, partage, Ediscience international, 1992. HENRIET, D. et Jean-Charles ROCHET, Microéconomie de l'assurance , Economica 1991 LAFFONT, J.J., Économie de l'incertain et de l'information, Economica, 1985, 210 p. SALANIE, B. (1994), Théorie des contrats, Economica. 141 p. VARIAN, H.R., Analyse microéconomique, De Boeck Université, 1995.			
Faculty or entity in charge	ESPO			

Programmes containing this learning unit (UE)					
Program title	Acronym	Credits	Prerequisite	Aims	
Master [120] in Forests and Natural Areas Engineering	BIRF2M	5		٩	
Master [120] in Agricultural Bioengineering	BIRA2M	5		٩	
Master [120] in Chemistry and Bioindustries	BIRC2M	5		٩	
Master [120] in Environmental Bioengineering	BIRE2M	5		٩	
Minor in Economics	LECON100I	5		٩	
Additionnal module in Economics	LECON100P	5		٩	