UCLouvain

lecge1333

2018

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	1 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. - - - - *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	The grade will be determined by a final written examination
Teaching methods	Lectures and exercises sessions
Content	Normal form games. Dominated strategies. Rationalisable strategies. Nash equilibria. Extensive from games. Sequential rationality. Backward induction. Subgame perfection. Signalling games. Adverse selection. Moral Hazard. Hidden information
Inline resources	Lecture notes and homeworks for the exercises sessions available on Moodle
Bibliography	• Lecture notes and homeworks for the exercises sessions available on Moodle
Other infos	Prerequisite course Mathematics 1 and 2
Faculty or entity in charge	ESPO

Programmes containing this learning unit (UE)

Program title	Acronym	Credits	Prerequisite	Aims
Bachelor in Philosophy, Politics and Economics	PPE1BA	5		
Master [120] in Agricultural Bioengineering	BIRA2M	5		
Master [120] in Chemistry and Bioindustries	BIRC2M	5		
Master [120] in Environmental Bioengineering	BIRE2M	5		
Master [120] in Forests and Natural Areas Engineering	BIRF2M	5		
Minor in Economics	LECON100I	5		
Additionnal module in Economics	LECON100P	5		
Additionnal module in Mathematics	LMATH100P	5		