


5 credits

30.0 h + 6.0 h

Q1

Teacher(s)	Decerf Benoit ;Maniquet François ;
Language :	English
Place of the course	Louvain-la-Neuve
Main themes	This course, like the second compulsory course in microeconomics, is intended to teach the basics of modeling techniques in microeconomics. The modeling techniques that are covered here are individual decision theory and game theory. In individual decision theory, the emphasis will be on the equivalence between the choice approach and the preference approach to individual decision-making and on the axiomatic derivation of the consequences of rationality assumptions. In game theory, the emphasis will be on modeling interaction situations like games, and on the basic techniques of analyzing games to deduce the equilibrium strategies.
Aims	<p>1 Students are expected to know the basics of individual decision theory and game theory, and to be able to solve middle level problems in those two fields, which includes mastering the appropriate mathematical techniques. As a result, students are expected to be able to use decision and game theory to model situations of social inter-actions.</p> <p>-----</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>
Evaluation methods	<p>1) The main evaluation consists of a closed-book exam during the exam session.</p> <p>2) Bonus points can be awarded during the lectures as a function of the active participation of the students and their solution to exercises and problems submitted by the lecturers.</p>
Content	The course is composed of 13 three-hour lectures and four tutorials. The contents will be: 1) abstract individual decision theory and the axioms of revealed preferences, economic decision theory and the law of demand, classical demand theory and the dual approaches to demand, rational decision under uncertainty and risk aversion. 2) definition of a game, a strategy, dominant, dominating, undominated and rationalizable strategies, Nash equilibrium and the existence theorem, subgame perfection and trembling hand perfection.
Bibliography	<ul style="list-style-type: none"> • A. Mas-Colell, M. D. Whinston and J. R. Green, 'Microeconomic theory', O.U.P.: New York - Oxford, 1995.
Other infos	Background in economics and mathematics Written exam, about theory and exercises A. Mas-Colell, M. D. Whinston and J. R. Green, 'Microeconomic theory', O.U.P.: New York - Oxford, 1995. One T. A. is in charge of the tutorials.
Faculty or entity in charge	ECON

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Aims
Master [120] in Economics: Econometrics	ETRI2M	5		
Master [120] in Economics: General	ECON2M	5		