lecon2011
2017

Interdependencies and Strategic Behavior

5 credits	30.0 h + 12.0 h	Q2

Language :	English
Place of the course	Louvain-la-Neuve
Main themes	The course will present the basic theory of normal-form games and extensive-form games necessary to address the economic applications listed in the contents below.
Aims	1. The goal of the course is to introduce the student to the consequences of the fact that economic agents often behave strategically, taking into account the interdependency of other agents' decisions on their own; the course will also study the outcome of economic interactions in competitive markets. To that end the student will be provided with the tools and methods of game theory necessary to address the issue. - - - - *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	Written exam.
Teaching methods	Lectures and homeworks. Lecture notes will be distributed before each lecture.
Content	1. Static Games. Best-response Behavior. Nash Equilibrium. Applications: Cournot Model of Duopoly, Bertrand Model of Duopoly. 2. Extensive-form games. Sequential rationality. Backwards induction. Subgame perfection. Applications: Sequential Bargaining. Repeated Games. Applications: Collusion between Cournot Duopolists. 3. Static Games of Incomplete Information. Bayesian Nash Equilibrium. Applications: Cournot Competition under Asymmetric Information. Applications: Auction Theory. 4. Extensive-form games with incomplete information. Perfect Bayesian Equilibrium. Signaling Games. Cheap Talk. Applications: Job-Market Signaling. 5. Interactions in markets. Competitive Markets and Social Efficiency. Externalities and Social Inefficiency. Market Games.
Faculty or entity in charge	ECON

Programmes containing this learning unit (UE)

Program title	Acronym	Credits	Prerequisite	Aims
Master [120] in Economics: General	ECON2M	5		🔍
Master [60] in Economics : General	ECON2M1	5		🔍