





4 credits	30.0 h + 15.0 h	Q1
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Teacher(s)	Henry de Frahan Bruno ;
Language :	French
Place of the course	Louvain-la-Neuve
Prerequisites	LBIR1110 Math I LMAT1111E Math II <i>The prerequisite(s) for this Teaching Unit (Unité d'enseignement – UE) for the programmes/courses that offer this Teaching Unit are specified at the end of this sheet.</i>
Main themes	<p>After a short introduction to the economic science, this course examines:</p> <ul style="list-style-type: none"> · economics of production and its specifics to agricultural production (supply irreversibility, technical progress, risk and uncertainties, size and scope dimension), · economics of consumption and its specifics to food consumption (low price and income elasticities, product differentiation, imperfect competition), · price formation and the functioning of good and service markets (instability, cycles, marketing margins, rationing) and factor markets (labour, capital, land, rent), · the contrasting situations of perfect and imperfect competition (monopoly, oligopoly, monopsony, oligopsony), · the spatial and interregional relations of exchanges. <p>Through these topics, this course uses and explains the fundamental concepts of economics. It uses the deductive approach of economics, and graphical and mathematical methods. The dual approach is introduced and used because of its importance in the empirical literature and its interest for illustrating the reasoning that characterizes economics. Additional sessions apply the theoretical tools through many exercises.</p>
Aims	<p>With respect to the learning outcomes of the bioengineering bachelor programme, this course contributes to the following learning outcomes:</p> <p>1.2 and 1.3: theoretical lectures 1.5: exercises sessions 2.1: theoretical lectures 3.2: theoretical lectures and exercises sessions 7.3 and 7.4: theoretical lectures</p> <p>Being a general introduction to the economic science, this course aims a double objective:</p> <ol style="list-style-type: none"> 1. to explain students concepts and basic mechanisms of the economic science that help understand and anticipate socio-economic phenomena that are observed in the current economic context, in particular in the agricultural and food sector, using the mathematical formalism of this social science, 2. to provide students the main tools of economic analysis that will be needed in economics and management courses of their study programme but also useful for an autonomous way of thinking. <p>At the end of this course, students are able to:</p> <ul style="list-style-type: none"> · master the fundamental concepts of economic theory of the producer, consumer and market equilibrium in perfect competition and imperfect competition as well, · apply these concepts and interpret phenomena of supply, demand and exchanges, in particular those that can be observed in the agricultural and food sector · solve simple economic problems through exercises. <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	The evaluation of the course includes a first written exam on the theoretical lectures and a second exam on the exercises.
Teaching methods	Theoretical lectures illustrated with slide shows and sessions on exercises
Content	<ol style="list-style-type: none"> 1. Introduction to the economic science ECONOMICS OF PRODUCTION 2. The technology 3. The maximisation of profit 4. The minimisation of cost

	<p>5. The cost functions 6. The supply of the firm 7. The optimal combination of productions 8. The supply of the industry ECONOMICS OF CONSUMPTION 9. The analysis of the consumer choice 10. The individual demand 11. The market demand 12. Risks and uncertainties THE MARKET ECONOMY 13. The market equilibrium and the price formation 14. Situations of imperfect competition 15. Market failures and the public intervention</p>
<p>Inline resources</p>	<p>Moodle</p>
<p>Bibliography</p>	<p>Ouvrages de référence, lectures complémentaires, transparents et diaporama, disponibles aussi sur Moodle. Ouvrages de référence recommandés: Berkeley Hill, An Introduction to Economics, Concepts for Students of Agriculture and the Rural Sector, CABI, Third Edition, 2006. Robert Pindyck et Daniel Rubinfeld, Microéconomie, 7ème édition, Pearson Education France, Paris, 2009. (version originale anglaise disponible) Hal. R. Varian, Introduction à la Microéconomie, Ouvertures économiques, Série Prémisses, 7ème édition, Editions De Boek Université, Bruxelles, 2011 (version originale anglaise disponible)</p>
<p>Faculty or entity in charge</p>	<p>AGRO</p>

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Aims
Master [120] in Environmental Science and Management	ENVI2M	4		
Bachelor in Bioengineering	BIR1BA	4	LBIR1110 AND LBIR1111	
Master [60] in Environmental Science and Management	ENVI2M1	4		
Minor in Development and Environment	LDENV100I	4		
Additional module in Chemistry	LCHIM100P	4		