

## **LBIR1242**

2016-2017

## Principes d'Economie

| 3.0 credits | 30.0 h + 15.0 h | 1q |
|-------------|-----------------|----|
|-------------|-----------------|----|

| Teacher(s) :         | Henry de Frahan Bruno ;   |  |  |  |  |
|----------------------|---|--|--|--|--|
| Language :           | Français  |  |  |  |  |
| Place of the course  | Louvain-la-Neuve  |  |  |  |  |
| Inline resources:    | iCampus   |  |  |  |  |
| Prerequisites :      | Calculus, like the course LBIR1200 "Mathématiques générales (II).  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.  |  |  |  |  |
| Main themes :        | After a short introduction to the economic science, this course examines:  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.  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 |  |  |  |  |
| Aims :               | theoretical tools through many exercises.  With respect to the learning outcomes of the bioengineering bachelor programme, this course contributes to the following learning outcomes:  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  |  |  |  |  |
|                      | Being a general introduction to the economic science, this course aims a double objective:  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,  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.  At the end of this course, students are able to:  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.  |  |  |  |  |
|                      | 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 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 :            | Introduction to the economic science     ECONOMICS OF PRODUCTION     The technology     The maximisation of profit     The minimisation of cost     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   |  |  |
| Bibliography :       | Textbooks, other readings, overheads, slide shows available on iCampus.   |  |  |
| 1                    |   |  |  |
|                      | Recommended textbook:   |  |  |
|                      |   |  |  |
|                      | Hal. R. Varian, Introduction à la Microéconomie, Ouvertures économiques, Série Prémisses, 7ème édition, Editions De Boek Université, Bruxelles, 2011 (original English version available) |  |  |
|                      | Other textbooks:  |  |  |
|                      | Office textbooks.   |  |  |
|                      | 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. (original English version   |  |  |
|                      | available)  |  |  |
| Faculty or entity in | AGRO  |  |  |
| 1                    |   |  |  |
| charge:              |   |  |  |
|                      |   |  |  |

| Programmes / formations proposant cette unité d'enseignement (UE) |           |         |                               |                        |  |  |
|---|-----------|---------|-------------------------------|------------------------|--|--|
| Intitulé du programme   | Sigle     | Credits | Prerequis                     | Acquis d'apprentissage |  |  |
| Minor in Development and Environment                              | LDENV100I | 3       | -                             | ٩                      |  |  |
| Additionnal module in Chemistry                                   | LCHIM100P | 3       | -                             | ٩                      |  |  |
| Bachelor in Bioengineering  | BIR1BA    | 3       | LBIR1110 <b>and</b> LMAT1111E | ٩                      |  |  |
| Master [60] in Environmental Science and Management               | ENVI2M1   | 3       | -                             | ٩                      |  |  |
| Master [120] in Environmental Science and Management              | ENVI2M    | 3       | -                             | ٩                      |  |  |
| Advanced Master in Rural<br>Economics and Sociology               | ECOS2MC   | 4       | -                             | ٩                      |  |  |