

## Microeconomics 2

**ECTS** : 3

**Volume horaire** : 18

### **Description du contenu de l'enseignement :**

The course aims at (1) developing the economic theory of the producer, (2) introducing the concepts of partial equilibrium, surpluses, and deadweight loss and (3) presenting the concept of general equilibrium and pareto efficiency.

### **Compétence à acquérir :**

By the end of this module, students will have demonstrated:

#### **Knowledge**

1. An ability to understand/use the following concepts/tools : a production function (Cobb-Douglas), an isoquant, a Marginal Rate of technical Substitution of factors of production (MRTS), a marginal and an average productivity, a production (marginal, average) cost function.
2. An ability to analyse the concept of return to scale (increasing-decreasing-constant) and its implication.
3. An ability to determine how a producer determines its optimal allocation of factors of production (construction of the demand functions of factors of production).
4. An ability to analyse the producer short term optimal quantity in a pure and perfect competitive framework (which leads to the construction of the individual supply function of goods).
5. An ability to understand the long term dynamic and the establishment of the equilibrium at the branch level.
6. An ability to understand/use the following concept/tools : partial equilibrium, surpluses, deadweight loss and how they evolve with public intervention.
7. An ability to determine a general equilibrium (with and without production) and how to assess of its efficiency (using Pareto criteria).

#### **Skills**

8. An ability (1) to determine mathematically and graphically an isoquant, a Marginal Rate of technical Substitution of factors of production (MRTS), a marginal and an average productivity, a production cost function, a marginal cost and an average cost and (2) to interpret, explain comment the results obtained.
9. An ability (1) to determine mathematically and graphically an optimal allocation of factors of production (construction of the demand functions of factors of production) and (2) to interpret, explain comment the results obtained.
10. An ability to determine mathematically and graphically (1) the profit and shut down thresholds of a firm (2) a short term optimal quantity produced by a firm in a pure and perfect competitive framework and (3) the construction of the individual supply function of goods for a firm.
11. In a context of pure and perfect competition, an ability (1) to determine mathematically and graphically a partial equilibrium, surpluses (or change in surpluses) for each economic agents and, deadweight-losses and (2) to interpret, explain comment the results obtained.
12. In a context of pure and perfect competition, an ability (1) to determine mathematically and graphically a general equilibrium (with or without production), (2) to demonstrate whether this equilibrium is pareto optimal or not (3) to analyse how this equilibrium could be impacted if some parameters were to change.
13. An ability to use and adapt economic concepts studied in class on new topics, situation, context.

#### **Values and Attitudes**

14. An ability to take responsibility for their studies in and outside of class and to be proactive and take initiative for further individual development.
15. An ability to work effectively, and appropriately with others in class.

#### **Mode de contrôle des connaissances :**

un contrôle continu (50%) et un examen (50%)

