Microeconomics - Public Economics

ECTS : 3

Volume horaire : 18

Description du contenu de l'enseignement :

The course aims at providing an explanation / exploration of the fundamental microeconomics theories, with a specific focus on the role of market inefficiencies and the different solutions emphasised by the theories to resolve them. Following a first chapter of consolidation of what has been taught during the end of the first year of a degree course (pure and perfect competitive framework, the existence of a general equilibrium, its pareto-efficiency leading to the first theorem of welfare economics) this course will mainly focus on market inefficiencies and will cover in detail the theory of externality and the theory of public goods.

Compétence à acquérir :

By the end of this module, students will have demonstrated: **Knowledge** 1. An ability to understand how a partial equilibrium could be achieved in a decentralised economy and how public intervention could affect (or not) this equilibrium and impact surpluses of economic agents. 2. An ability to analyse the mechanism by which a general equilibrium could be achieved (in an economy with or without production) and to assess its pareto optimality. 3. An ability to understand the first and second fundamental theorem of welfare and their limits. 4. An ability to describe how game theory (and more specifically the Nash equilibrium) could be used to reconsider the theorems of welfare. 5. An ability to define the concept of externality, to understand how it generates some inefficiency in a decentralised economy and to explore the different sollutions to resolve this market inefficiency (internalisation, public intervention (Pigou), redefinition of property rights (Coase theorem)). 6. An ability to define the concept of public goods, to understand the condition of optimality for the production of this type of goods (i.e Bowen Lindahl Samuelson condition), to understand how its production generates some inefficiency in a decentralised economy and to explore the different sollutions-procedures to resolve this market inefficiency (public intervention through majority decision (Bowen vote), individualised taxation etc.). **Skills** 7. An ability to determine mathematically and graphically (1) a partial equilibrium (2) surpluses (or change in surpluses) of each economic agents and (3) deadweight-losses and how they evolve due to state intervention in a context of pure and perfect competition. 8. An ability (1) to compute mathematically, (2) represent graphically a general equilibrium (with or without production), and to demonstrate whether this equilibrium is pareto optimal or not. The students is also expected to be able to interpret how this equilibrium could be impacted if some parameters were to change in a context of pure and perfect competition. 9. An ability to determine a Nash equilibrium in a game with imperfect and complete information (prisonners dilemma type of game), and the type of policies/institutions that could be implemented to converge Nash and Pareto equilibria. 10. An ability to determine mathematically and graphically (1) a partial equilibrium (2) the surpluses (or change in surpluses) for each economic agents and (3) a deadweight-loss in presence of externality (positive or negative). 11. An ability to compute mathematically and to describe graphically how (1) public intervention (2) internalisation or merger (3) a right to pollute market may impact (a) a partial equilibrium (b) the surpluses (or change in surpluses) for each economic agents and (c) the deadweight-loss for the economy as a whole in presence of externality (positive and/or negative). 12. An ability to determine mathematically and graphically (1) the condition of pareto optimality (Bowen Lindahl Samuelson conditions) (2) the surpluses (or change in surpluses) for each economic agents and (3) the deadweight-loss generated in a decentralised economy for the production of public goods. 13. An ability to compute mathematically the quantity/price of public goods under different financing assumptions such as (1) a procedure of voluntary subscription (2) a situation of non-state intervention (decentralised economy equilibrium) (3) a mechanism of individualised taxation (4) a taxation implemented through majority vote (Bowen vote). 14. To use and adapt economic concepts studied in class on new topics, situation, context. **Values and Attitudes** 15. An ability to take responsibility for their studies in and outside of class and to be proactive and take initiative for further individual development. 16. An ability to work effectively, and appropriately with others in class.