

Content

Course Code	Course Name	Semester	Theory	Practice	Lab	Credit	ECTS
ECON463	Welfare economics	6	3	3	3	3	5

Prerequisites	
Admission Requirements	

Language of Instruction	French
Course Type	Elective
Course Level	Bachelor Degree
Objective	Static optimization is one of the main tools of the theory and practice of economics. This course aims to provide a quite rigorous introductory knowledge of this tool, and make use of it in simple equilibrium models. And in the same time to utilize these models to master the tool.
Content	This course aims to teach nonlinear programming and to deal with small equilibrium models, with two goods, two consumers, two producers and two factors, as an application of this mathematical tool. The walrasian exchange model, the Lindahlian exchange model, and an exchange externality model and their corresponding pareto optimums are treated. Then, the walrasian production model is studied, and two simple models of general equilibrium are established.
References	Sydsaeter, Hammond, Mathematics for economic analysis. Sydsaeter, Hammond, Further mathematics for economic analysis. Simon, Blume, Mathematical economics. Silberberg, The structure of economics, a mathematical analysis.

Theory Topics

Week	Weekly Contents
1	Concavity, quasiconcavity. Optimization with equality constraints.