Bachelor Degree- Master Degree
ECONOMETRICS OF COMPETITIVE AND REGULATED MARKETS (12 ECTS)
MOD. 1 Econometrics of Industrial Organizations (6 ECTS)

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CFU/ Credits	SSD Subject Code	Lectures (hours)	Tutorials (hours)	Lab (hours)	Seminars (hours) [*inserire voce: es.* **attività di campo; seminari; uscite**;…*]*	Year	Teaching Language
6		40	0	0	0		ENGLISH

Goals and Learning outcomes
The most trivial competence that the student should obtain from the course is to master the interpretation of the results of OLS, IV and 2SLS estimation. More ambitiously, the course aims at teaching something about the scientific method, namely how statistical inference can help in testing hypotheses and which arrangements have to be done to this procedure in a complex context such as the economic environment.

Prerequisites

Course Content
The objective of the course is to provide the students with some econometric tools for the analysis of the behavior of industries and markets: the tools covered are the linear regression model, as estimated through ordinary least squares or through instrumental variables, and the simultaneous equations model. We deal with the econometric analysis of prices and quantities in competitive markets.
The classical way to analyse the market equilibrium, i.e. the mechanism for which a certain amount of a good is sold at a certain price in a competitive market, is to see it as the intersection of a demand and of a supply curve. The former is obtained as the aggregation over consumers of the individual demand curves given by the optimization of the consumer's utility under the budget constraint. The latter is similarly obtained aggregating over firms the individual supply curves that are the result of profit optimization when the price is taken as given. We will follow this derivation, but we will remark, whenever possible, the weaknesses arising in this way of addressing the problem. In particular, in mainstream economic theory, the firm has often been considered as a "black box". As this approach is hardly satisfactory, we will first take a look inside the black box and will describe the productive structure of the firm using the concepts of production frontier and efficiencies. Then, we will consider the demand behavior of consumers in the simplified case in which no demand shift takes place; even if this situation is rare in the real world, it provides a useful benchmark for the study of more complex cases.
Then we turn to analyze the interaction between firms and consumers in real competitive markets. The first topic covered in this part concerns the diffusion of new products: this describes a situation in which the interaction among firms and between firms and consumers is still limited; the treatment of the topic will benefit from insights from marketing. The second topic will deal with the relation between prices

and sales in real markets when both supply and demand are affected by shifts: we will present econometric tools for the estimation of demand and supply functions, namely simultaneous equations models.

Econometrics of Competitive Markets
Lecture 1 - The Nature of the Firm
Lecture 2 - Linear Regression
Lecture 3 - Production Theory
Lecture 4 - Consumption Theory
Lecture 5 - The Instrumental Variables Estimator
Lecture 6 - Simultaneous Equations Systems and the Demand-Supply Equilibrium
Lecture 7 - Product Diffusion Models
Lecture 8 - Price Dynamics
Lecture 9 - Introduction to Time Series Models

Mode of Delivery
The course will be composed of 40 hours of classical lectures.

Recommended reading list (Bibliography)
The course will be based on a set of slides written by the lecturer. A list of academic papers addressing more advanced topics will be provided to the students as additional readings. Mathematical derivations will be dealt with in handouts written by the lecturer.

Assessment
Students will be evaluated on the basis of a written essay in which they discuss a published paper.

Office hours

Lectures Calendar
http://www3.uninsubria.it/pls/uninsubria/consultazione.mostra_pagina?id_pagina=6606

Exames calendar
http://www3.uninsubria.it/pls/uninsubria/consultazione.mostra_pagina?id_pagina=6605