

Academic Year: ( 2020 / 2021 )

Review date: 10/07/2020 11:24:07

Department assigned to the subject: Economics Department

Coordinating teacher: SIOTIS , GEORGIOS

Type: Compulsory ECTS Credits : 6.0

Year : 2 Semester : 2

**REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)**

The student must have completed successfully the first year of MEIM/MIEM in order to register for this course.

**OBJECTIVES**

In this course, the student will master different techniques used in empirical industrial organization. The student will also acquire the ability to apply these techniques to specific firms and industries to assess their performance.. The core competences to be learned by the students include applied economic theory and empirical method that are used to analyse specific issues and particular industries (automobiles, cement, mobile telephony, pharmaceuticals, civilian aircraft etc.).

**DESCRIPTION OF CONTENTS: PROGRAMME**

The topics covered include:

- 1) Estimation of cost functions (with replication of Nerlove 1963 and Christensen and Green 1976)
- 2) Computing the cost of capital: an application to State aid (with an illustration to the Ciudad de la Luz case)
- 3) Identification of causal effects
- 4) Identification of conduct
- 5) Collusion (with replication: Steen & Roeller, cement cartel, AER)
- 6) Market structure and entry
- 6) Demand estimation: discrete choice (with a repliaction based on Shum 2004)
- 7) Empirical analysis of mergers: efficiency vs market power, identification of Type I and Type II errors
- 8) Advertising and promotion as a strategic tool: an illustration with the pharmaceutical industry
- 9) Forensic economics: construction and estimation of the counterfactual
- 10) World duopoly: the Airbus vs. Boeing rivalry

**LEARNING ACTIVITIES AND METHODOLOGY**

The course requires the presence of the student. The core of the formative activities are the classes taught by the professor, which are designed to transmit the competences described in the sections above. The classes are designed to allow the participation of the students, which is taken into account to compute the final grade point average.

Lecture notes (powepoint presentations)will be distributed to students in order to facilitate their review of the course materials and the understanding of the main topics covered in the course.

The course combines qualitative questions to reinforce the main theoretical concepts, analytical questions to help the understanding of the mathematical models used in empirical research of industrial organization.

The specific methods used by the instructor include:

- Sessions focused on the main topics and theoretical concepts of empirical industrial organization.

- Sessions focused on specific applications, real industries and case studies.
- Discussion and participation of students in class, with special emphasis on the discussion of case studies.
- Electronic distribution of lecture notes and materials for each class.
- Use of electronic presentations and the web during the on class sessions.
- Electronic distribution of problem sets, with individual corrections and feedback provided to students.
- Student presentations
- Written Exam to test acquired knowledge.

## ASSESSMENT SYSTEM

<b>% end-of-term-examination/test:</b>	40
<b>% of continuous assessment (assignments, laboratory, practicals...):</b>	60

60% of the final grade will consist of the continuous assessment. The latter will be established on the basis of student presentations (30%), a mid-term exam (20%) and assignments/class participation (10%).

## BASIC BIBLIOGRAPHY

- Davis, P., Garces, E. Quantitative techniques for competition and antitrust analysis, Princeton University Press, 2010
- Heckman, J. J., and E. E. Leamer Handbook of Econometrics Volume 6A, North-Holland Publishing, 2007
- Miranda, M., J., and P. L. Fackler Applied Computational Economics and Finance, The MIT Press, 2002
- Miranda, M., J., and P. L. Fackler Applied Computational Economics and Finance, The MIT Press, 2002
- Motta, M., Competition Policy, Theory and Practice, Cambridge University Press, 2004
- Perloff, J.M., Karp, L. S., and A. Golan Estimating Market Power and Strategies, Cambridge University Press, 2007
- Train, K. Discrete Choice Methods with Simulation, Cambridge University Press, 2009
- Wooldridge, J. Econometric Analysis of Cross Section and Panel data, The MIT Press, 2002