# Industrial Economics

## Prof. Bernardino Cesi

***COURSE AIMS AND INTENDED LEARNING OUTCOMES***

The course aims to provide the microeconomic tools for analysing the strategic choices of the main players operating in the market: companies, institutions, consumers and independent authorities. To this end, the course will study the mechanisms that regulate the interaction between these categories through the concepts of non-cooperative game theory. Through the course's analytical/strategic approach, students will acquire an understanding of the market dynamics, shaping and operation of the main industrial sectors. Students will understand how the choices of the main independent authorities (such as the authority guaranteeing market competition) influence the markets through the strategic reaction of companies and consumers. The course also ensures the study of the main tools for analysing public demand and public procurement procedures, regulated in Italy by the "procurement code".

***COURSE CONTENT***

*Game theory*

* Strategic interaction.
* Static and dynamic games.

*Oligopoly*

* Static models of oligopolistic competition.
* Bertrand.
* Cournot.

*Collusion*

* Role of repeated games and perfect balances in subgames.
* Why compete and the role of cooperation.
* When it is convenient to cooperate/collude.
* Empirical analysis of collusive phenomena.

*Product differentiation*

* Horizontal differentiation.
* Why it is convenient for companies.
* Strategic role of the differentiation degree.

*Price discrimination*

* Different consumers based on preferences.
* 1st, 2nd and 3rd degree price discrimination.
* Role of different offer packages.
* Welfare analysis in the case of different discrimination degrees.

*Vertical relations*

* Upstream and downstream monopoly.
* Role of downstream competition.
* Single price vs two-part tariffs.

*Economics of public procurement*

* What is a public contract.
* Economic analysis of the procurement code.
* The main competitive procedures.
* Award formulas in procurement procedures.
* Collusion in tenders.
* Case studies.

***READING LIST***

- L. Cabral (2002), *Economia industriale*, Milan, Carocci, Chaps. 2, 4, 5, 7, 8, 10, 11, 12.

- H. Varian, Cafoscarina, *Microeconomia*.

- L. Cabral, *Economia Industriale*, Carocci.

- The handbook of procurement.

- G.L. Albano-M. Sparro-R. Zampino, Le formule di aggiudicazione nelle gare d'appalto all'offerta economicamente più vantaggiosa, L’industria, 2014.

- Divisione in lotti, partecipazione e competizione nelle gare d’appalto, Quaderni Consip, 2016.

- B. Cesi-A. Di Natale (2018), Transparency in repeated procurement: when hiding is better, Economics Bulletin, Volume 39, issue 1.

- AGCM (Italian Competition Authority)

***TEACHING METHOD***

Should in-person teaching be reintroduced:

* Frontal lectures in which students are presented with slides and which require real-time interaction in class. The slides will be uploaded to the website immediately after the lecture.
* Students are asked questions during lectures and, depending on their answers, may earn bonus marks that will be added to their final exam mark during the first exam session.
* At the end of each theoretical part, there will be tutorial sessions with the lecturer and discussions of case studies.

***ASSESSMENT METHOD AND CRITERIA***

The final exam is structured in two parts. The first part includes a selection of multiple-choice questions that are assigned positive marks for correct answers and penalty marks for wrong answers.

The second part includes an exercise aimed at testing students' technical-practical and problem-solving skills. The exercise is divided into several questions.

Should the anti-COVID protocol suspend in-person teaching, lectures will be held online via the Teams platform; the course programme will remain the same as above. The exam modality will change to only an oral exam, also held via the Teams platform, in which students may still be required to carry out calculations and practical exercises, such as those conducted during lectures.

***NOTES AND PREREQUISITES***

The main prerequisites are *Political Economics* (which is preparatory) and *Basic* *Mathematics*. The *Game Theory* tool is preferable but not a prerequisite as the initial part of the course presents the basic tools of Game Theory used during the course.

Further information can be found on the lecturer's webpage at http://docenti.unicatt.it/web/searchByName.do?language=ENG, or on the Faculty notice board