

## EP 532: Industrial Organisation Theory

M.A. Optional Course

Number of Credits: 4

Method of Evaluation: There will be two examinations, one mid-semester and one end-semester, of equal weightage.

*Industrial Organization* studies operation and performance of imperfectly competitive markets as well as the behaviour of firms in these markets. The big questions are: why are firms and markets organized the way they are; how does the organization of markets determine how firms behave and how the markets perform; and how does the behaviour of firms affect the structure and performance of markets. This field of economics has developed substantially in recent decades, especially through the application of non-cooperative game theory, and has had strong influence on competition policy and regulation in many countries.

This course is designed to introduce the student to selected topics in modern IO. We will discuss why firms exist and what limits their size. We will study the behaviour of firms in markets that are structured as monopoly, dominant firm or oligopoly, and we will analyse the welfare implications of these market structures. It is well known that imperfectly competitive markets may operate inefficiently, which leaves room for improvements by regulators. We will look at the measures regulators use for assessing and controlling the exercise of market power. A brief course outline is given below.

### Brief Course Outline

1. Cournot Equilibrium : Existence, Uniqueness, Stability, Free Entry Equilibrium, Welfare etc.
2. Bertrand-Edgeworth Equilibrium : Existence Problems and its solutions.
3. Stackelberg Equilibrium and Issues in Entry Deterrence.
4. Cournot vs Bertrand Debate.
5. Product Differentiation : Horizontal (Location), Vertical (Quality), Differentiation on both Information and Location.
6. Price Discrimination : 1st Degree, 2nd Degree, 3rd Degree and Oligopoly and Price Discrimination.
7. Oligopoly and Financial Structure.
8. Repeated Games- Reputation, Gang of Four Theorem.
9. Network Externalities.
10. Research and Development.

11. Contestable Markets.

12. IO in Developing Countries.

Readings : The course will be based on journal articles to a large extent. All relevant articles will be referred to in the class from time to time. The following books are useful for the course.

1. J. Tirole - Industrial Organisation Theory
2. J. Friedman - Oligopoly Theory
3. Oz Shy - Industrial Organisation
4. S. Martin - Advanced Industrial Economics
5. Anindya Sen (Ed.) - Industrial Organisation
6. X. Vives - Oligopoly Pricing : Old Ideas and New Tools