

# BUSINESS SCHOOL

# Course Outline 2015 ECON 702: INDUSTRIAL ORGANISATION (15 POINTS)

**Semester 2** (1155)

### **Course Prescription**

Industrial Organization (IO) is concerned with the interdependence of market structure, firm behavior and market outcome. Concepts of game theory will be systematically introduced and applied to study strategic firm behaviour in a variety of general and more industry-specific market settings. In each case, we will analyse the implications of the market behaviour for consumers and society and explore the potential role for public policy with instruments like regulation, competition policy and patent policy.

# **Programme and Course Advice**

The background of basic microeconomics (at ECON 301 Advanced Microeconomics) and basic industrial organization (ECON 304 Firms and Markets) is required for this course, and the basic knowledge of game theory (at ECON 701 Microeconomic Theory level) is also important for understanding the models. Please make sure that you are well-equipped with the above required knowledge before enrolling this course.

Successful completion of this course enables students to read and understand the most recent research papers, write a dissertation in the field and become a successful consultant, industry analyst or policy advisor. Students with an interest in policy issues should consider taking the closely related course ECON 782 Regulation and Competition Policy.

# Goals of the Course

The goal of this course is to equip students with an understanding of the functioning of imperfectly competitive markets, which they will find useful in subsequent employment, other postgraduate courses or research. This topics course aims to provide the most recent industrial organisation (IO) theory to enable students to better understand and evaluate market outcomes in a variety of different industry settings.

#### **Learning Outcomes**

By the end of this course it is expected that the student will:

- 1. be familiar with modern theories and their recent developments;
- 2. be able to understand and analyse the interdependence of market structures, firm behaviour and market outcomes;
- 3. be familiar with more advanced game theory tools and their applications;
- 4. know how to apply game theory tools to analyse market situations involving vertical relations:
- 5. be able to critically evaluate anti-competitive conduct under different market structures;
- 6. be able to understand basic ideas of competition policy and regulation.

#### **Content Outline**

Week 1	Introduction and Firm Theory
Week 2	Monopoly and Dominant Firms
Week 3	Oligopoly
Week 4	Price Discrimination
Week 5	Product Differentiation
Week 6	Collusion and Cartel
Week 7	Vertical Relations; Presentation 1 & 2
Week 8	Tying and Bundling; Presentation 3 & 4
Week 9	Predation and Exclusion; Presentation 5 & 6
Week 10	Retailer Market Power; Presentation 7 & 8
Week 11	Horizontal Mergers; Presentation 9 & 10
Week 12	Milk Markets in New Zealand; Presentation 11 & 12

# Learning and Teaching

This course will be taught in the first semester and will have a total of 36 lecture contact hours. In addition to the lecture contact hours, the student will be expected to spend six hours a week working on the course material.

# **Teaching Staff**

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# **Learning Resources**

There is no prescribed textbook. The lecture notes will be made available and will be the primary material for the coursework.

Useful supplemental readings are:

Tirole, Jean, Theory of Industrial Organization, MIT Press, 1988.

Carlton, Dennis and Jeffrey Perloff, *Modern Industrial Organization*, fourth edition, Pearson Addison Wesley 2005.

Belleflamme, Paul and Martin Peitz, *Industrial Organization: Markets and Strategies*, Cambridge University Press, 2010.

Additional more specific references will be given in class.

#### **Assessment**

The final grade will be 100% coursework, consisting of two **Tests** worth 50%, one **Assignment** worth 20%, and one **Presentation** worth 30%.

The tests and assignments are designed to give students practice and operational knowledge of the different theories presented in the lecture. They aim to develop the students' problem-solving skills, and their ability to digest and analyse written material.

This assignment will be distributed via CECIL only. Tests will be held in Week 6 and Week 12.

#### Assessment continued

Each student will be assigned one research paper for presentation. These papers, as selected in the syllabus, are the "classical" research outcomes published in top journals including the *American Economic Review* and the *Rand Journal of Economics*, which provide significant contributions to IO theory. Students are required to read and review the assigned papers in detail and prepare slides for presentation.

A typical presentation consists of three parts: an introduction, which gives the audience a brief idea of the motivation and the contribution of the paper; followed by the main contents which would include a simplified model and the main results; and finally, the presenter should summarize and give a brief comment on the paper, including the limitations and potential extensions. Ideally the presenter would also examine the recent literature on their topic following that "classical" paper.

Each presentation has a time limit of 20 minutes, and presenters are expected to deliver the basic ideas of the paper as well as their own comments. An ideal allocation of time would consist of 5 minutes for the introduction, 10 minutes for the main contents, and 5 minutes for the summary and conclusion.

Students are also required to write a summary and review report for the presented paper, based on their presentation slides, and the summary must be handed in before the end of week 12. This exercise is very important for building research capability.

Learning Outcome	Test 1	Test 2	Assignment	Presentation
1	X	X	X	X
2	Х	Х	Х	X
3	Х	Х	Х	Х
4	Х	Х	Х	X
5	X	X	X	X
6	X	Х	Х	Х