Industrial Economics

Lecturer: Alexis V. Belianin
Class teacher: Olga V. Rozanova

Course description

Industrial Economics or Economics of Industry, is a one-year course which is one of ‘further units’ of the external programme of the University of London (UoL). IO is one of the main ‘special’ economics courses which applies microeconomic and econometric techniques to the study of firms as organizations, market structures, strategic interaction, market efficiency and industrial policy. An undergraduate IO course at ICEF is based on students’ knowledge of Intermediate Microeconomics and the first course of Econometrics. Inasmuch as many topics in modern IO require extensive use of game-theoretic tools, a few introductory classes will be used to review the relevant techniques and applications. Further reviews of specific topics will be included in the course curriculum whenever necessary.

The programme of this course mostly follows the requirements of the University of London external programme as covered by the Study Guide, with some thematic extensions. The course consists of three major parts. The first part constitutes a methodological and theoretical introduction into the tools, methods and approaches used all over the course. It provides a quick review of game theoretic concepts, followed by the discussion of the nature of markets, the firm and the agency relations within business organizations. The second part constitutes the core of the course, and covers imperfect competition in static and dynamic settings, theoretical and empirical studies of collusion, entry and accommodation, product differentiation, monopolistic behaviour, vertical integration and determinants of market structure. The third part is devoted to industrial policy and efficiency analysis, including government regulation and natural monopolies reforms with examples and applications.

Teaching objectives

- Give a simple yet thorough introduction into the main methods of economic analysis of industry structure and firm behaviour under various conditions of technology, competition, and organization;

- Elaborate students’ skills and abilities to use modern theoretical and empirical tools to formulate and solve economic problems;

- Explore in details how economists approach and answer specific empirical questions, such as whether a particular industry is vertically integrated,
whether there are is evidence of price collusion, or whether the industry has features of natural monopoly;

- Provide the students with a sound intuition into the specific features of particular markets, including those of contemporary Russia.

**Teaching methods**

The following methods and forms of study are used in the course:

- lectures
- classes
- home assignments (to be submitted before class)
- self-study.

Timetable of lectures and classes will be announced in due course. Given the limited number of contact hours, regular self study is crucial for successful completion of the course, including external examination.

**Assessment**

Two examinations: the winter examination at the end of the Autumn semester, and the final examination at the end of the Spring semester (this latter covers all course material). Besides, there will be one control work in the middle of the Autumn semester. Home assignments are to be handled regularly, and also contribute to the final grade for the course.

External examination at the University of London takes place in May-June; its results do not count towards the final grade for the course at SU-HSE. IO is an integral part of the separately graded State Graduate Examination for the Russian degree programme (to be held in June 2007); this examination will consist of the same type of questions as those in the other papers.

**Grade determination**

Course grades are determined as follows:

Autumn semester:

- Home assignments — 15%
- Midterm control work — 25%
- Winter examination — 60%
Spring semester and final grade:

- Home assignments — 15%
- Autumn semester grade — 25%
- Final examination — 60%

Main reading

There is no single textbook for the course, although the most valuable one is the (now classical) text by Jean Tirole. Another useful and more new text is that by Church and Ware. Both texts will be used throughout the course at a regular basis, alongside with the UoL Study Guide and Examiners’ Reports. A few more texts will be used occasionally or for the sake of reference — these are listed as additional readings. Further references for each theme (mostly journal articles, with the relevant weblink) can be found below, with compulsory readings starred (*). Published sources may be complemented by lecture notes and other teaching material available at http://mief.hse.ru. Please check this source at regular rate, and pay attention to the other sources suggested by the course instructors.


Additional reading


Other readings, including journal articles, are listed under particular topics.

**Course outline**

1. **Noncooperative games for applied analysis**
   
   
   * [Tir], Appendix on game theory.


   • Fudenberg, Drew, and Jean Tirole. Noncooperative game theory for IO: introduction and overview. In: [HB], ch.5.

2. **Introduction to Industrial Organisation**

   * [Mar], Ch. 1.

   * [PRN], Ch. 1.

3. **Size and structure of the firm**

   * [Tir], The theory of the firm (Introductory chapter)
* [SG], ch.1


• [CP], ch. 2


4. Agency theory, ownership and control

* [Tir], The theory of the firm (Introductory chapter)

* [SG], ch.2


• Holmstrom, Bengt and Jean Tirole. The theory of the firm. In: [HB], ch.2

• [CP], ch.2
• Laffont, Jean-Jacques and Ramon Martimort. The Principal-Agent theory. PUP, 2002.


5. Static price competition in oligopoly models

* [Tir], ch.5
* [SG], ch.3
• [CP], ch.7
• [Shy], ch.6
• [Mar], ch.5

• Chapiro, Carl. Theory of oligopoly behavior. In: [HB], ch.6


6. Dynamic price competition

* [Tir], ch.6
* [SG], ch.4
* [CP], ch.6-7


- Sherer and Ross, 1990, Ch. 7-8.

- [Shy], ch.6


7. Econometric methods for applied work with application to price collusion


8. Entry deterrence and entry accommodation
9. Product differentiation

* [Tir], ch.7
* [SG], ch.6

* [Shy], ch.7
* [CP], ch.8


10. Advertising

* [CP]

* [Shy]


11. Monopoly and price discrimination

* [SG], ch.7

* [CP], ch.11-12

* [Tir], ch.3

* [Mar], ch.15

• Sherer and Ross, ch.13


12. Вертикальная интеграция и вертикальные ограничения

* [Tir], ch.4
* [SG], ch.8
* [Mar], ch.17


• [CP], ch.13

• Sherer and Ross, ch.15

• Katz, M.L. Vertical contractual relations. In: [HB], ch.11


13. The determinants of market structure


* [SG], ch.9

  • [Mar], ch.8

  • Sherer and Ross, ch.3-4

14. Competition and industrial policy

  * [Mar], various chapters.

  * [SG], ch.10

  • [CP], ch.17, 20

  • Sherer and Ross, ch.3-4.

15. Regulation and natural monopolies


  * [SG], ch.11


Distribution of hours
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