

#### **International Economics**

Academic year 2024-2025

**Industrial Organisation** 

El092 - Autumn - 6 ECTS

Friday 12h15 - 14h00

#### **Course Description**

This course focuses on the economics of industry. We discuss static and dynamic aspects of imperfect competition and the sources of market power. We then study price discrimination and the economics of networks and platforms. For each topic, the course will consider the main theoretical developments as well as applications. We will use the textbook "Industrial Organisation. Markets and Strategies" by P. Belleflamme and M. Peitz (CUP, 2015) as the main reference..

#### > PROFESSOR

**Damien Neven** 

Office hours

#### > ASSISTANT

Hossein Tohidimehr

Office hours

#### **IMPORTANT**

Regular attendance is compulsory, and any absence must be promptly communicated to the teacher. In the event of missing more than two sessions, students are expected to provide well-documented justifications for unforeseeable circumstances (e.g. illness, accident, death of a relative), directly to the Direction of Studies. Failure to justify absences beyond two sessions will result in the assignment of code N.

Students are also reminded of the following legal rules:

The teacher owns the **copyright** on the material they created for this course. As such, any reproduction or distribution of this document, in whole or in part, as well as of any other material created by the teacher for the course, is prohibited unless permission is granted by the author.

Recording (as video or audio) a course without the consent of the teacher and other participants is strictly forbidden.

# Organisation

The main reference for the course is the textbook by Belleflamme and Peitz. Since some topic requires concepts in game theory that some students may not be familiar with, when we discuss these topics (for instance collusion, auctions, asymmetric information) we also provide some introduction to the relevant game theoretic tools. The main reference for game theory is the text book by Tadelis.

A detailed PowerPoint presentation is made available in advance for each class. The reading assigned for each topic is an additional support for understanding and studying the material but the PowerPoint presentation contains the material that students are expected to master.

There are four review sessions organised during term. Problem sets are distributed in advance of the session and the solutions are discussed during the session. In addition, review sessions are an opportunity to ask questions and further discuss the material presented in class, if needed.

In terms of evaluation, there are two take home problem sets during term, which account for 50% of the grade. There is a final exam which accounts for 40% of the grade and class participation accounts for the remaining 10%. The final exam include both essay questions and problems. Students can make a selection among a number of essays question and problems, with a constraint such that the share of either problem sets or essay question cannot account for less one third of the final grade.

Since the final day of the term is just five days before Christmas (and so as avoid congestion at the end of term), the schedule is organised in such a way that the exam is taking place during the penultimate week of term.

## **Syllabus**

#### 1. Oligopoly (September 20)

- Bertrand
- Cournot
- Strategic substitutes and complements
- Stackelberg
- Entry

Belleflamme and Pleitz, Industrial Organisation, Cambridge University Press, 2015, Chapter 3

#### 2. Oligopoly II (September 27)

- Limited capacity and price competition Edgeworth paradox
- Mixed strategies
- Existence and Uniqueness of Equilibrium

Belleflamme and Pleitz, Industrial Organisation, Cambridge University Press, 2015, Chapter 4

#### 3. Product differentiation (October 4)

- Horizontal differentiation; Hotelling and Salop models
- Vertical differentiation
- Natural oligopolies
- Empirical analysis of product differentiation

Belleflamme and Pleitz, Industrial Organisation, Cambridge University Press, 2015, Chapter 5 Sutton, John, (1992), Sunk Costs and Market Structure. Price Competition, Advertising, and the Evolution of Concentration. MIT Press

#### 4. Collusion (October 11)

- Repeated games
- Sustainability of tacit collusion

Belleflamme and Pleitz, Industrial Organisation, Cambridge University Press, 2015, Chapter 14 Tadelis, S. Game theory, An Introduction, Princeton University Press, 2013. – Part III Motta, Competition Theory and Practice, CUP, 2004, chapter 4

#### 5. Auctions (October 18)

- Bayesian games
- Auctions
- Introduction to Mechanism design
- Revelation principle

Tadelis, S. Game theory, An Introduction, Princeton University Press, 2013. – Part IV – chapter 13 and 14

Klemperer, P, (2008), Competition policy in auctions and bidding markets, Handbook of Antitrust Economics, MIT Press.

#### 6. Price discrimination - Group pricing (October 25)

- Group and personalized pricing in monopoly
- Group and personalized pricing in oligopoly
- Geographic price discrimination

Belleflamme and Pleitz, Industrial Organisation, Cambridge University Press, 2015, Chapter 8

### 7. Price discrimination – Menu pricing (November 1)

- Menu pricing in monopoly
- Menu pricing and competition

Belleflamme and Pleitz, Industrial Organisation, Cambridge University Press, 2015, Chapter 9

#### 8. Consumer inertia (November 8)

- Uninformed consumers and search costs
- Switching costs

Belleflamme and Pleitz, Industrial Organisation, Cambridge University Press, 2015, Chapter 7

### 9. Asymmetric information (November 15 – 3 hours )

- Perfect bayesian equilibrium
- Signalling games
- Prices and advertising as signals

Belleflamme and Pleitz, Industrial Organisation, Cambridge University Press, 2015, Chapter 7

#### 10. Strategic incumbents and entry (November 22)

- Taxonomy of entry deterrence
- Strategies affecting costs
- Strategies affecting demand

Belleflamme and Pleitz, Industrial Organisation, Cambridge University Press, 2015, Chapter 16

### 11. Networks (November 29)

- Direct and indirect network effect
- Market for a single network good
- Market for several network goods

Belleflamme and Pleitz, Industrial Organisation, Cambridge University Press, 2015, Chapter 20-21 Belleflamme and Peitz, The Economics of Platforms, CUP, 2021, Chapter 1

#### 12. Market intermediation and platforms (December 6 – 3 hours)

- Standardization
- Standard wars
- Public policy in network markets
- Intermediaries as two-sided platforms

### 13. Exam (December 13)