



Course and Examination Fact Sheet: Autumn Semester 2019

7,260: Industrial Organization and Digitalization

ECTS credits: 4

Overview examination/s

(binding regulations see below)

Decentral - Presentation (in groups - all given the same grades) (60%)

Decentral - examination paper written at home (individual) (30%)

Decentral - Active participation (10%)

Attached courses

Timetable -- Language -- Lecturer

[7,260,1.00 Industrial Organization and Digitalization](#) -- Englisch -- [Eschenbaum Nicolas](#), [Bühler Stefan](#)

Course information

Course prerequisites

Students should have a firm background in microeconomic analysis and game theory (preferably at the level of Microeconomics III, at the minimum Microeconomics II).

Course content

Industrial Organization (IO) is an important field in microeconomics that studies the behavior of consumers and firms in imperfectly competitive markets, and in particular when firms have market power. It brings classic, analytical economic thinking to bearing on questions arising in markets in the real world and plays an important role in areas such as market regulation and market design. In addition, in recent years digitalization has profoundly changed how many such markets work and has become a further topic of analysis in IO. The goal of this course is to familiarize students with the most important models and methods of industrial organization, enable them to follow and critically assess recent research in this field, and provide insights into relevant issues in modern, digital markets.

In this course, students

1. learn how to analyze markets with workhorse models of imperfect competition
2. acquire powerful additional tools for the analysis of modern real-world markets
3. gain insights into and learn about the research frontier in issues related to the digitalization of markets, such as dynamic pricing, privacy, (inter-)net neutrality, or pricing algorithms, and
4. explore the economics behind market design

Students will have to complete a problem set and give a group presentation on a recent research paper. In addition, each group will have to prepare questions in advance for the presentation of every other group, based on the research paper that will be presented. At the start of each presentation, one group will be randomly selected to provide the discussion to the presentation, using its prepared questions. The problem set, the group presentation, and the preparation/questions will be graded.

Course structure

Tentative structure (subject to change):

Part I: Tools

1. Extensions to Monopoly and Oligopoly Theory
2. Product Selection, Quality, and Information
3. Complementarity I: Monotone Comparative Statics



4. Complementarity II: Supermodular Games

Part II: Applications

1. Dynamic Pricing I
2. Dynamic Pricing II
3. Dynamic Pricing III
4. The IO of Pricing Algorithms
5. Privacy
6. Net Neutrality
7. Market Design I
8. Market Design II

Course literature

Belleflamme, P. and M. Peitz (2015), *Industrial Organization: Markets and Strategies*, Cambridge University Press, 2nd edition.
Martin, S. (2001), *Advanced Industrial Economics*, Blackwell, 2nd edition. Motta, M. (2004), *Competition Policy: Theory and Practice*, Cambridge University Press. Tirole, J. (1988), *Theory of Industrial Organization*, MIT Press. Vives, X. (1999), *Oligopoly Pricing: Old Ideas and New Tools*, MIT Press. Wolfstetter, E. (2002), *Topics in Microeconomics. Industrial Organization, Auctions, and Incentives*, Cambridge University Press.

Note: The lectures on monotone comparative statics and supermodular games will be based on the following journal article:
Amir, R. (2005), Supermodularity and Complementarity in Economics: An Elementary Survey, *Southern Economic Journal*, 71(3), 636-660.

Additional readings, including relevant journal articles, will be indicated during the course.

Additional course information

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Examination information

Examination sub part/s

1. Examination sub part (1/3)

Examination time and form

Decentral - Presentation (in groups - all given the same grades) (60%)

Remark

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Examination-aid rule

Practical examination

No examination-aid rule is necessary for such examination types. The rules and regulations of the University of St. Gallen apply in a subsidiary fashion.

Supplementary aids

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Examination languages

Question language: English

Answer language: English

2. Examination sub part (2/3)



Examination time and form

Decentral - examination paper written at home (individual) (30%)

Remark

One problem set to be solved.

Examination-aid rule

Term papers

- Term papers must be written without anyone else's help and in accordance with the known quotation standards, and they must contain a declaration of authorship.
- The documentation of sources (quotations, bibliography) has to be done throughout and consistently in accordance with the APA or MLA standards. The indications of the sources of information taken over verbatim or in paraphrase (quotations) must be integrated into the text in accordance with the precepts of the applicable quotation standard, while informative and bibliographical notes must be added as footnotes (recommendations and standards can be found, for example, in METZGER, C. (2017), Lern- und Arbeitsstrategien (12th ed., Cornelsen Schweiz).
- For any work written at the HSG, the indication of the page numbers both according to the MLA and the APA standard is never optional.
- Where there are no page numbers in sources, precise references must be provided in a different way: titles of chapters or sections, section numbers, acts, scenes, verses, etc.
- For papers in law, the legal standard is recommended (by way of example, cf. FORSTMOSER, P., OGOREK R. et SCHINDLER B. (2018, Juristisches Arbeiten: Eine Anleitung für Studierende (6. Auflage), Zürich: Schulthess, or the recommendations of the Law School).

Supplementary aids

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Examination languages

Question language: English

Answer language: English

3. Examination sub part (3/3)

Examination time and form

Decentral - Active participation (10%)

Remark

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Examination-aid rule

Practical examination

No examination-aid rule is necessary for such examination types. The rules and regulations of the University of St. Gallen apply in a subsidiary fashion.

Supplementary aids

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Examination languages

Question language: English

Answer language: English

Examination content

Students are expected to hold a presentation on an advanced research paper in groups. The presentation material has to be handed in on time before the presentation. The presentation accounts for 60% of the grade. In addition, students are expected to solve a take home problem set on the material discussed in class and to hand in their individual solutions on time. The problem set accounts for 30% of the final grade. Finally, students are also expected to prepare questions for the discussion of each other group and will be selected to lead the discussion based on their questions at least once during the course at the start of the presentation. The questions/discussion account for 10% of the grade.



Examination relevant literature

The lecture notes and other material discussed in class is required as background knowledge for all parts of the examination. Furthermore, recommended textbooks should be consulted for solving the problem set. The presentation will be on an advanced research paper that is assigned to each group. To understand the paper fully, students are also required to perform additional literature research on their own.

Please note

Please note that this fact sheet alone is binding and has priority over any other information such as StudyNet (Canvas), personal databases or faculty members' websites and information provided in their lectures, etc.

Any possible references and links within the fact sheet to information provided by third parties are merely supplementary and informative in nature and are outside the University of St.Gallen's scope of responsibility and guarantee.

Documents and materials that have been submitted no later than the end of term time (CW51) are relevant to central examinations.

Binding nature of the fact sheet:

- Information about courses and examination time (central/decentral) and examination type starting from the beginning of the bidding on 22 August 2019
- Information about examinations (examination aid regulations, examination content, examination-relevant literature) for decentral examinations after the 4th semester week on 14 October 2019
- Information about examinations (examination aid regulations, examination content, examination-relevant literature) for central examinations as from the starting date for examination registration on 4 November 2019

Please consult the fact sheet again after these deadlines have expired.