



Course and Examination Fact Sheet: Autumn Semester 2021

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%)

Examination time: term time

Decentral - examination paper written at home (individual) (20%)

Examination time: term time

Decentral - Active participation (20%)

Examination time: term time

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.

Learning objectives

In this course, students learn how to analyze markets with workhorse models of imperfect competition; acquire powerful additional tools for the analysis of modern real-world markets; gain insights into issues related to the digitalization of markets, such as dynamic pricing, pricing algorithms, and blockchain.

Course content

Industrial Organization (IO) is an important field in microeconomics that studies the behavior of consumers and firms in imperfectly competitive markets. 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 markets work.

Students will have to complete a written problem set, present, and discuss recent research articles (see below for details).

Course structure and indications of the learning and teaching design

Tentative structure (subject to change):

Part I: Tools.

1. Extensions to Monopoly and Oligopoly Theory
2. Complementarity I: Monotone Comparative Statics
3. Complementarity II: Supermodular Games

Part II: Applications.

4. Dynamic Pricing: Introduction



5. Dynamic Pricing: Research Papers
6. Dynamic Pricing (Guest Lecture)
7. Pricing Algorithms: Introduction
8. Pricing Algorithms: Research Papers
9. Blockchain: Introduction (Guest Lecture)
10. Blockchain: Research Papers
11. Competition Policy: Market Power & Mergers
12. Wild Card

The goal of this course is to familiarize students with some of 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. To this end, students will be able to shape the debate in class by i) presenting relevant research papers, and ii) discussing fellow classmates' papers. Guest lecturers will provide a real-world perspective on the topics discussed in class.

Students will have to complete a written problem set, present, and discuss recent research articles (see below for details).

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.

Note: The lectures on monotone comparative statics and supermodular games will be based on the following 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

In the case of the President's Board having to implement new directives due to the SARS-CoV-2 pandemic in AS2021, the course information listed above will be changed as follows:

- The course is conducted online - including student presentations and discussions - via Zoom on Canvas;
- The recordings of both lectures and presentations are available for 30 days;
- The lecturers inform via Canvas on the changed implementation modalities of the course.

The examination information listed below would be changed as follows:

- The presentations and discussions are conducted online and are being recorded;
- There will be no changes to the written problem set.

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%)

Examination time: term time

Remark

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Examination-aid rule

Presentations

In presentations, aids for visual presentation can be used. These aids can be specified or restricted by the lecturers.

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) (20%)

Examination time: term time

Remark

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Examination-aid rule

Term papers

Written work must be written without outside help according to the known citation standards, and a declaration of authorship must be attached, which is available as a template on the StudentWeb.

Documentation (quotations, bibliography, etc.) must be carried out universally and consistently according to the requirements of the chosen/specified citation standard such as e.g. APA or MLA.

The legal standard is recommended for legal work (cf. by way of example: FORSTMOSER, P., OGOREK R., SCHINDLER B., Juristisches Arbeiten: Eine Anleitung für Studierende (the latest edition in each case), or according to the recommendations of the Law School).

The reference sources of information (paraphrases, quotations, etc.) that has been taken over literally or in the sense of the original text must be integrated into the text in accordance with the requirements of the citation standard used. Informative and bibliographical notes must be included as footnotes (recommendations and standards e.g. in METZGER, C., Lern- und Arbeitsstrategien (latest edition)).

For all written work at the University of St.Gallen, the indication of page numbers is mandatory, regardless of the standard chosen. Where page numbers are missing in sources, the precise designation must be made differently: chapter or section title, section number, article, etc.

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 (20%)

Examination time: term time

Remark

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Examination-aid rule

Active classroom participation

In the "Active classroom participation" examination form, regular participation in class is assessed.

The assessment criteria can be as follows:

- Requests to speak enrich the discussion (productive) / requests to speak disturb the discussion (counterproductive);
- Requests to speak are correct/requests to speak are incorrect;
- Requests to speak are frequent/average/rare;
- No requests to speak, but students follow the lesson/no requests to speak and students do not noticeably follow the lessons.

Supplementary aids

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Examination languages

Question language: English

Answer language: English

Examination content

Students are expected to solve one short take home problem set (20% of the final grade) on the material discussed in class and to hand in their individual solutions on time. Students are expected to hold a presentation on an advanced research paper in groups (60% of the final grade). The presentation material has to be handed in on time before the presentation. Finally, students are also expected to discuss the research paper presented by another group (20% of the final grade).

Examination relevant literature

The lecture notes and other material discussed in class are required as background knowledge for all parts of the examination. The notes for each lecture will be made available on Canvas at latest on the day of the lecture.

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. A selection of research papers will be published on Canvas at the beginning of the semester. To understand the paper fully, students are also required to perform additional literature research on their own.



Please note

Please note that only this fact sheet and the examination schedule published at the time of bidding are binding and takes precedence over other information, such as information on StudyNet (Canvas), on lecturers' websites and information in lectures etc.

Any references and links to third-party content within the fact sheet are only of a supplementary, informative nature and lie outside the area of responsibility of the University of St.Gallen.

Documents and materials are only relevant for central examinations if they are available by the end of the lecture period (CW51) at the latest. In the case of centrally organised mid-term examinations, the documents and materials up to CW 42 are relevant for testing.

Binding nature of the fact sheets:

- Course information as well as examination date (organised centrally/decentrally) and form of examination: from bidding start in CW 34 (Thursday, 26 August 2021);
- Examination information (regulations on aids, examination contents, examination literature) for decentralised examinations: in CW 42 (Monday, 18 October 2021);
- Examination information (regulations on aids, examination contents, examination literature) for centrally organised mid-term examinations: in CW 42 (Monday, 18 October 2021);

Examination information (regulations on aids, examination contents, examination literature) for centrally organised examinations: two weeks before the end of the registration period in CW 45 (Monday, 8 November 2021).