

Course and Examination Fact Sheet: Autumn Semester 2023

10,271: Microeconomics for Finance

ECTS credits: 4

Overview examination/s

(binding regulations see below)

decentral - Analog written examination, Analog, Individual work individual grade (80%)

Examination time: Term time

decentral - Written work, Digital, Group work individual grade (20%)

Examination time: Term time

Attached courses

Timetable -- Language -- Lecturer 10,271,1.00 Microeconomics for Finance -- English -- Müller-Itten Michèle

Course information

Course prerequisites

I will assume that you master the material typically covered in an undergraduate sequence of calculus and linear algebra, including constrained optimization. You will also need a good command of mathematical notation and proof techniques. Prior knowledge of microeconomics is helpful.

Learning objectives

The course provides a brief yet rigorous introduction to modern microeconomic theory, with applications to financial economics. It equips students to pursue their own research by familiarizing them with the fundamental tools of decision, noncooperative games and contract theory.

Upon successful completion of this course, students are able to...

- construct models of choice with and without uncertainty.
- recognize key assumptions behind utility maximization models and noncooperative games.
- determine the equilibrium strategies and beliefs in simultaneous and sequential multiplayer games.
- articulate how market structure and information frictions affect resource allocation and efficiency.

Course content

The course is organized in three parts. Part I concerns individual decision making, with topics such as revealed preference, choice under uncertainty and consumer demand. Part II concerns strategic interactions and uses tools of noncooperative game theory to predict behavior in simultaneous and dynamic settings with and without perfect information. Part III concerns contract theory and shines a spotlight on situations with information frictions, such as adverse selection and moral hazard problems. Throughout, the theoretical tools are connected to applications from financial economics.

Course structure and indications of the learning and teaching design

The course is taught in a 'flipped' format, requiring substantial independent preparation before and active participation during each class. Most new material will be introduced ahead of time (on studynet) through short lecture videos and readings. This gives you an opportunity to go through the new material at your own pace, and frees up time for clarifications and interactive activities. Class meetings will be mostly structured as a "problem-solving workshop", where we address the questions that came up during the prep and work through practice problems that apply the material to concrete situations.



Course literature

Lecture notes and digital resources will be available on StudyNet.

In addition, the following texts are useful supplementary references on the topics discussed in the course:

- Bolton, P., and M. Dewatripont, (2004). Contract Theory. MIT Press
- Hammack, R., (2013). Book of proof. 2013. Available online.
- Kreps, D., (2012). Microeconomic Foundations I: Choice and Competitive Markets. Princeton University Press.
- Kreps, D., (2023). Microeconomic Foundations II: Imperfect Competition, Information, and Strategic Interaction. Princeton University Press.
- Laffont, J.-J., and D. Martimort, (2002). The Theory of Incentives: The Principal-Agent Model, Princeton University Press.
- Levin, J., and P. Milgrom (2004). Introduction to choice theory, Course notes. Available online.
- Mas-Colell, A., Whinston, M. D., & Green, J. R. (1995). Microeconomic theory (Vol. 1). New York: Oxford University Press.
- Salanie, B., (2017). The Economics of Contracts: A primer. MIT Press.
- Tadelis, S., (2013). Game Theory: An Introduction. Princeton University Press.

Additional course information

--

Examination information

Examination sub part/s

1. Examination sub part (1/2)

Examination modalities

Examination type Analog written examination

Responsible for organisation decentral
Examination form Written exam
Examination mode Analog
Time of examination Term time
Examination execution Synchronous
Examination location On Campus

Grading type Individual work individual grade

Weighting 80% Duration --

Examination languages Question language: English Answer language: English

Remark

--

Examination-aid rule

Closed Book

The use of aids is prohibited as a matter of principle, with the exception of pocket calculator models of the Texas Instruments TI-30 series and, in case of non-language exams, bilingual dictionaries without any handwritten notes. Any other aids that are admissible must be explicitly listed by faculty members in the paragraph entitled "Supplementary aids" of the course and examination fact sheet; this list is exhaustive.

Procuring any aids, as well as ensuring their working order, is the exclusive responsibility of students.



Supplementary aids

Each student can bring one double-sided, A4-sized, handwritten note sheet to the exam.

2. Examination sub part (2/2)

Examination modalities

Examination type Written work
Responsible for organisation decentral
Examination form Written work
Examination mode Digital
Time of examination Term time
Examination execution Asynchronous
Examination location Off Campus

Grading type Group work individual grade

Weighting 20% Duration --

Examination languages

Question language: English Answer language: English

Remark

graded homework

Examination-aid rule

Free aids provision

Basically, students are free to choose aids. Any restrictions are defined by the faculty members in charge of the examination under supplementary aids.

Supplementary aids

--

Examination content

During the semester, students will submit graded problem sets (accounting for 20% of the total grade) that cover key concepts from the previous classes. Students are encouraged to discuss problems collaboratively, but each student must independently write up their submitted answers.

At the end of the semester there is a final written exam (accounting for 80% of the total grade), covering all course content. A detailed syllabus will be provided no later than the end of the first week of class.

Examination relevant literature

Lecture slides and videos, problem sets and solutions, class problems, individual lecture notes, assigned readings.



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, 24 August 2023);
- Examination information (supplementary aids, examination contents, examination literature) for decentralised examinations: in CW 42 (Monday, 16 October 2023);
- Examination information (supplementary aids, examination contents, examination literature) for centrally organised mid-term examinations: in CW 45 (Monday, 06 November 2023);
- Examination information (regulations on aids, examination contents, examination literature) for centrally
 organised examinations: two weeks before the end of the de-registration period in CW 45 (Monday, 06 November
 2023).