



DEPARTMENT OF ECONOMICS

NEF1012 Microeconomics II, 10 credits

Mikroekonomi II, 10 högskolepoäng

Third-cycle level / Forskarnivå

Confirmation

This syllabus was confirmed by the Department of Economics on 2018-12-06, and is valid from Autumn semester 2018.

Responsible Department

Department of Economics, School of Business, Economics and Law

Entry requirements

To be eligible for the course the participant must be admitted to third cycle studies at the Department of Economics, Gothenburg University or other departments, faculties or universities.

Learning outcomes

On successful completion of the course, the third-cycle student is expected to:

Knowledge and understanding

- know and understand the assumptions and theoretical foundations of the most central parts of game theoretic analysis used in economics, including iterated dominance, Nash equilibrium, backwards induction, subgame perfect equilibrium and Bayes-Nash equilibrium.
- know how the game-theoretic tools have been applied to study economic issues related to conduct in and performance of markets and organizations characterized by decision-making interdependencies and lack of information.

Competence and skills

- be able to read and understand moderately complex theoretical articles published in international research journals.
- be able to use the basic game-theoretic tools to study economic problems, formulated as

games.

Judgement and approach

- be able to judge which game-theoretic approach is best suited for the study of various economic problems.
- be able to spot potential weaknesses in game-theoretic analysis applied to economic problems.

Course content

This course is a continuation of the course Microeconomics I and is divided into two parts.

The first part of the course extends the analysis of decision theory by covering the basic elements of game theory, including games in normal form and extensive form and solution concepts such as iterated dominance, Nash equilibrium, backwards induction and Subgame perfect equilibrium. Games of incomplete information are studied using e.g. the Bayes-Nash equilibrium as well as the perfect Bayes-Nash equilibrium. Some refinements such as the intuitive criterion are mentioned.

The second part of the course extends the first micro course by introducing more realistic elements to the analysis of how markets and organizations work, using the game-theoretic tools acquired in the first part. We will acknowledge that people's choices are often interdependent, in the sense that one person's best choice often depends on what other people do, as well as the fact that people often lack all the information they need to make their decisions. This part of the course covers basic market forms such as monopoly, oligopoly, bargaining and auctions and also introduces some basic contract theory.

Types of instruction

The course consists of lectures outlining the theory illustrated by examples and classes to discuss the students' solutions to problem sets distributed during the lectures.

Language of instruction

The course is given in English.

Grades

The grade Pass (G) or Fail (U) is given in this course.

Students with excellent results may, in addition to the grade pass, also ask for a certificate attesting their excellent results. This additional evaluation of the student's work cannot be registered in LADOK. To obtain such a certificate, the student must qualify for the pass grade and in addition demonstrate a deeper understanding of the course content on the exam.

Types of assessment

The assessment of the learning in the course takes the form of a final exam covering all areas of the course. To obtain a pass grade on the exam, and on the course, the student has to

demonstrate an ability to replicate the analysis of most parts of the course.

A student who has failed the examination twice has the right to change examiner, if practically possible. Such request must be submitted in writing to the Deputy Head of the Department of Economics.

Course evaluation

A written anonymized course evaluation will be carried out at the end of the course. The results of the evaluation will be communicated to the students and will function as a guide for the development of the course.

Other information

Students registered for Third Cycle studies at another faculty or university must apply for admission to the course to the Deputy Head of the Department of Economics.

Appendix 1: Reading list