

Course syllabus

Introduktion till mikroekonomisk teori

Introduction to Microeconomic Theory

EXTA40, 6 credits, G1 (First Cycle)

Valid for: 2023/24

Faculty: Faculty of Engineering, LTH

Decided by: PLED I

Date of Decision: 2023-04-14

General Information

Main field: Technology.

Elective for: F4, I2, Pi4

Language of instruction: The course will be given in Swedish

Aim

The aim of the course is to give the student a well balanced overview of microeconomic theory and its central issues and problems and a sound knowledge base for further studies in economics.

In particular, the course aims at creating an understanding of the functioning of markets, of how producers and consumers make their decisions and of how economic agents gains or loses from government intervention (regulations, taxes, subsidies etc.) of markets.

Emphasis is placed on the part of microeconomic theory that can be assumed to be of particular interest so students in the programmes for industrial economics and technical mathematics: production theory and the behaviour of producers in different market structures (industrial organisation).

Learning outcomes

Knowledge and understanding

For a passing grade the student must

After the course, students shall have an understanding of:

- the forces determining prices on markets,
- how government intervention in a market affects the markets and its agents,
- what determines the price sensitivity of agents and the consequences of various degrees of price sensitivity,
- the fundamental microeconomic theory of production and the behaviour of producers in different forms of competition,
- the fundamental microeconomic theory of consumer behaviour and the fundamental theory of externalities and public goods.

Competences and skills

For a passing grade the student must

After the course, students shall be able to apply basic analytical tools to:

- analyse how supply, demand and price on a market are affected by external factors,
- estimate the price sensitivity of market agents and analyse economic effects based on the different price sensitivities of different agents,
- analyse and account for winners and losers on a market as a result of government intervention,
- based on microeconomic theory account for the optimal behaviour of producers in various market structures,
- identify markets with externalities and account for solutions to correct those externalities,
- discuss and account for welfare effects of regulations and market failure.
- Students shall also develop the skill to judge economic statements based on microeconomic theory and assess to what extent they are consistent with the implications of the theory.

Judgement and approach

For a passing grade the student must

After the course, students shall understand the difference between positive and normative statements. Students shall also develop the ability to discuss a theory's assumption and the implication of these.

Contents

The course introduces microeconomic theory and is divided into four parts. The first part consists of the theory of supply, demand and equilibrium on a market and is the basis of studies in economics. The second part consists of consumer theory, i.e. the theory of the economic behaviour and decision-making of individuals. The third part consists of the theory of production and deals with the actions of a firm under various market structures (perfect competition, monopoly, oligopoly and monopolistic competition). The fourth and final part consists of two forms of market failure externalities and public goods. Here, it is analysed how society deals with the production and distribution of goods where the market cannot achieve the optimal solution on its own.

The course rests on three pillars: lectures, the course literature and exercises. For each part, there are exercises and an exercise session. The exercises both fulfill the pedagogical function of promoting an understanding of the theory and allows the student to practice the application of the analytical tools.

As a supplement to the exercises, there is a home assignment. The purpose of the home assignment is for the student to apply a certain part of the theory on a topical economic phenomenon in a deeper and more rigorous manner.

Examination details

Grading scale: TH - (U,3,4,5) - (Fail, Three, Four, Five)

Assessment: There is a written exam at the end of the course (85 % of grading points) and a voluntary home assignment (15 % of grading points), which can be handed in at one occasion per academic year. Grading is according to the LTH scale (failed, 3, 4, 5). 5: 84–100%, 4: 66–83%, 3: 50–65%, U: 0–49%.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

Admission

Assumed prior knowledge: FMAB65 Calculus in One Variable B1, FMAB70 Calculus in One Variable B2, FMAB20 Linear Algebra and FMAB30 or FMAB35 Calculus in Several Variables.

The number of participants is limited to: No

The course overlaps following course/s: GEMA35, TEK115, TEK116

Reading list

- Additional material.
- Nicholson, W. och Snyder, C.: Microeconomic Theory. Cengage Publishing, 2016. 12th Edition.

Contact and other information

Course coordinator: Adrian Mehic, adrian.mehic@nek.lu.se

Course homepage: <http://www.nek.lu.se>