



**LUND**  
UNIVERSITY

School of Economics and Management

## NEKN21, Economics: Advanced Microeconomic Analysis, 7.5 credits

*Nationalekonomi: Avancerad mikroekonomisk analys, 7,5 högskolepoäng*

Second Cycle / Avancerad nivå

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### Details of approval

The syllabus was approved by The Board of the Department of Economics on 2011-06-07 and was last revised on 2022-09-13. The revised syllabus applies from 2023-01-16, spring semester 2023.

### General Information

This is a single subject master course in economics. The course is either obligatory or optional within a number of master programmes at Lund University.

*Language of instruction:* English

Teaching may be in Swedish if all registered students have a good knowledge of Swedish.

*Main field of studies*

Economics

*Depth of study relative to the degree requirements*

A1N, Second cycle, has only first-cycle course/s as entry requirements

### Learning outcomes

#### Knowledge and understanding

Students shall:

- deepen their knowledge of the theory of decision making under uncertainty, and obtain knowledge in game theory and industrial organisation including theories of monopoly, oligopoly and contracts,
- be able to translate competitive situations as well as other economic and social

- interaction problems into formalised games,
- be able to describe practically encountered incentive problems in terms underlying information asymmetries and, aided by this classification, be able to analyse them and suggest solutions,
- develop a command of the basic theory of decision making under risk in such a way that they will be able to explain the role played by the consistency requirements, including the "independence axiom".

### **Competence and skills**

Students shall have the ability to independently:

- solve monopoly pricing problems, including problems that involve second and third degree price discrimination,
- solve games using basic solution concepts such as dominance, Nash equilibrium and subgame perfection, and be able to derive substantive economic conclusions from the solutions,
- evaluate arguments about likely implications of different actions on the way a market works in terms of competition and price formation,
- grasp non-cooperative game theory sufficiently well to explain simple games and their solutions to a layman.

### **Judgement and approach**

Students shall have a command of the course contents so that they will be able to deepen their knowledge by independently studying more advanced literature and scientific articles written at a reasonably technical level.

### **Course content**

The course presents modern microeconomic theory and a set of applications. The applications considered include:

- the theory of economic decision making under risk and uncertainty, including the important notions of risk aversion and stochastic dominance,
- non-cooperative game theory and the basic concepts of dominance, Nash equilibrium, and subgame perfection,
- the theory of monopoly with a classification and advanced treatment of the most common forms of price discrimination,
- oligopoly theory, developing game theoretic models of competition in prices and quantities as well as sequential competition,
- the basic theory of incentive problems created by asymmetric information about actions or states of nature.

### **Course design**

1. Teaching: Tuition consists of lectures and exercises where the student will get guidance in how to solve problems.

### **Assessment**

1. Examination: The examination consists of a written exam and optional home assignments. The written exam takes place at the end of the course. There will be

further opportunities for examination close to this date. Points from the home assignments can only be carried forward to examinations taken the same term.

2. Limitations on the number of examination opportunities: –

The University views plagiarism very seriously, and will take disciplinary action against students for any kind of attempted malpractice in connection with examinations and assessments. Plagiarism is considered to be a very serious academic offence. The penalty that may be imposed for this, and other unfair practices in examinations or assessments, includes suspension from the University for a specified period.

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.

*Subcourses that are part of this course can be found in an appendix at the end of this document.*

## Grades

Marking scale: Fail, E, D, C, B, A.

1. Grading: Grade (Definition), Points or percentage out of maximum points, Characteristic

A (Excellent), 85–100, A distinguished result that is excellent with regard to theoretical depth, practical relevance, analytical ability and independent thought.

B (Very good), 75–84, A very good result with regard to theoretical depth, practical relevance, analytical ability and independent thought.

C (Good), 65–74, The result is of a good standard with regard to theoretical depth, practical relevance, analytical ability and independent thought.

D (Satisfactory), 55–64, The result is of a satisfactory standard with regard to theoretical depth, practical relevance, analytical ability and independent thought.

E (Sufficient), 50–54, The result satisfies the minimum requirements with regard to theoretical depth, practical relevance, analytical ability and independent thought, but not more.

U (Fail), 0–49, The result does not meet the minimum requirements with regard to theoretical depth, practical relevance, analytical ability and independent thought.

Students have to receive a grade of E or higher in order to pass a course.

2. Weighting grades from different parts of the course: –

3. Grading scales for different parts of the course: –

## Entry requirements

Students admitted to the Master programme in Economics and who have taken a course in intermediate microeconomic analysis are qualified for this course. For other students at least 90 ECTS-credits in economics at the undergraduate level are needed for admission to all master courses in economics. To be admitted to this particular course these credits must include a course in intermediate microeconomic analysis (e.g. NEKG21).

## Further information

1. Transitional regulations: The course replaces NEKM21 "Advanced Microeconomic Analysis".
2. Limitations in the period of validity: –
3. Limitations: The course may not be included in the same degree as NEKM21 "Advanced Microeconomic Analysis".
4. Similar courses: This course has partly the same contents as NEK602 "Microeconomics Analysis C".
5. Limitations in renewed examination: –

## Subcourses in NEKN21, Economics: Advanced Microeconomic Analysis

Applies from H11

1101 Advanced Microeconomic Analysis, 7,5 hp  
Grading scale: Fail, E, D, C, B, A