

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

SUMY NATIONAL AGRICULTURAL UNIVERSITY

Faculty **of Economics and Management**

Department **of Economics and Entrepreneurship**

Syllabus of the educational component

Microeconomics

(compulsory)

Implemented within the educational program **Management**
in the specialty **073 "Management"**
at the **1st (bachelor's)** level of higher education

Sumy – 2024

Developers: Nadiya PYLYPENKO Associate Professor, Ph.D., Associate Professor of the Department Economics and Entrepreneurship named after Prof. I.M. Bryukhovetskyi

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| Considered, approved and approved at the meeting of the Department of Economics and Entrepreneurship named after Professor I.M. Bryukhovetskyi | Protocol of 05 June 2024 №15 |
| | |
| | Head of the of the Department <u>Svitlana TERESHCHENKO</u> (signature) |

Approved:

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Registered in the electronic database: date: 06.07. 2024 p.

1. GENERAL INFORMATION ABOUT THE EDUCATIONAL COMPONENT

| | | | | |
|------|--|---|-------------------|------------------|
| 1. | Name of EC | Microeconomics | | |
| 2. | Faculty/Department | Economics and Management/Economics and Entrepreneurship | | |
| 3. | Status OK | Compulsory | | |
| 4. | Specialty, of which OK is a component | 073 "Management" | | |
| 5. | NRK level | 6 | | |
| 6. | Semester and duration of study | 2, weeks 1-15 | | |
| 7. | Number of ECTS credits | 5 | | |
| 8. | Total number of hours and their distribution | Contact work (classes) full-time/part-time | | Independent work |
| | | Lectures | Practical/seminar | Laboratory |
| | | 44 | 30/10 | – |
| | | | | 76 |
| 9. | Language of instruction | Ukrainian | | |
| 10. | Lecturer/Coordinator of the educational component | Nadiya Pylypenko, Associate Professor of the Department of Economics and Entrepreneurship (room No. 403a, Economics Building) | | |
| 10.1 | Contact | 050-595-37-40 nadijapilipenko70@gmail.com | | |
| 11. | General description of the educational component | In the context of the modern market economy, one of the basic disciplines in the training program for specialists in economic fields is microeconomics, which studies the behavior and decision-making mechanisms of individual economic entities (individuals, households, enterprises, industries, public organizations, and government agencies, i.e., microsystems) that seek to achieve their goals by using limited resources that have alternative uses. The study of the academic discipline "Microeconomics" concludes with a final assessment in the form of an exam. | | |
| 12. | The purpose of the educational component | is to develop knowledge about the patterns of behavior of economic entities in market conditions, to master universal tools for making informed decisions about choices in the presence of limited resources and alternative opportunities, as well as methods for performing economic calculations related to the analysis and justification of rational behavior of microsystems in market conditions | | |
| 13. | Prerequisites for studying the educational component, connection with other educational components | 1. The educational component is the basis for the following disciplines: macroeconomics, business economics, marketing, management, accounting | | |
| 14. | Academic integrity policy | When studying the course, higher education students must adhere to the rules of academic integrity, in particular: - independent completion of all types of tasks, and forms of assessment provided for in this syllabus; - referencing sources of information when using ideas, developments, statements, and information; cheating – the assignment will not be graded; use of prohibited means during tests – the answer will not be counted; plagiarism – the assignment will not be counted (if the uniqueness of the text is less than 50%). | | |
| 15. | Link to the course in Moodle | https://cdn.snau.edu.ua/moodle/course/view.php?id=2471 | | |

2. LEARNING OUTCOMES AND THEIR RELATIONSHIP TO PROGRAMME LEARNING OUTCOMES

| Learning outcomes for OK: After studying microeconomics, the student is expected to be able to... | Program learning outcomes that the course aims to achieve | | How LOEC is assessed |
|--|--|---|---|
| | PLO 4 Demonstrate skills in identifying problems and justify management decisions | PLO 12 Assess legal, social, and economic consequences of the organization's functioning | |
| LOEC1: understand the basic concepts and categories of microeconomic theory, as well as the problems it investigates | x | | Multiple choice tests |
| LOEC2: understand the main types of market structures and the characteristics of economic agents' behavior in goods markets and factor markets | x | x | Multiple choice tests, calculation task (IRZ), completion of INDZ |
| LOEC3: understand the theory of general equilibrium and efficiency, the causes of market failure, and the need for government intervention in the functioning of markets | x | x | Multiple-choice tests, completion of independent assignments |
| LOEC4: find the optimal solution for economic agents in goods and resource markets (consumer optimum, profit maximization and cost minimization for firms, hiring decisions, optimal price setting by monopolists) | x | x | Multiple-choice tests, individual assignments |
| LOEC5: analyze the consequences of violations of perfect competition for consumers, producers, and society as a whole | x | x | Multiple choice tests, calculation task (IR), completion of IND |
| LOEC6: draw conclusions about the feasibility of investments based on net present value calculations | x | x | Multiple-choice tests, calculation tasks |

3. CURRICULUM

| Topic | Distribution within the overall time budget, full-time/part-time | | | Recommended reading O – main, D – supplementary |
|--|--|--------------|------------------|---|
| | Classroom work | | Independent work | |
| | Lk | P. / seminar | | |
| Topic 1. Subject and methods of microeconomics. 1. Microeconomics as a component of theoretical economics. 2. Goods, resource scarcity, and the problem of choice. 3. Methodology of microeconomic analysis, microeconomic models. | 4/2 | 2/- | 4/8 | O (1-4) D (8-13) |
| Topic 2. Demand, supply, and their interaction. 1. Demand and the law of demand. Non-price factors of demand. 2. Supply and the law of supply. Non-price factors of supply. 3. Market equilibrium. 4. Change in equilibrium. Price restrictions and taxes. 5. Dynamic model of market equilibrium. | 4/2 | 4/2 | 6/10 | O (1-4) D (8-13) |
| Topic 3. Elasticity. 1. The concept of elasticity. Price elasticity of demand. 2. Income elasticity of demand. 3. Cross-price elasticity of demand. 4. Supply elasticity | 2/- | 2/- | 6/10 | O (1-4) D (8-13) |
| Topic 4. Consumer choice theory. 1. Utility in economic theory and the problem of its measurement. The law of diminishing marginal utility of goods. 2. Consumer choice from an ordinalist perspective. Indifference curves. 3. Budget constraints. 4. Consumer optimum. | 2/- | 2/2 | 6/8 | O (1-4) D (8-13) |
| Topic 5. Analysis of consumer behavior. Individual and market demand. 1. Consumer response to price changes. Individual demand curve. 2. Consumer response to changes in income. 3. Income effect and substitution effect. 4. Consumer surplus. | 2/- | 2/- | 6/10 | O (1-4) D (8-13) |
| Topic 6. Theory of the firm: production 1. The enterprise as a market entity and the production-market system. 2. The production process. Production function. Isoquant. 3. Isoquant. Producer's optimum. Cost minimization. 4. Proportional variation of production factors. | 4/2 | 2/2 | 6/8 | O (1-4) D (8-13) |

| | | | | |
|---|-----|-----|------|-----------------------------|
| Economies of scale. | | | | |
| Topic 7. Production costs, revenue, and profit. 1. Economic, accounting, and opportunity costs. 2. Production costs in the short term. 3. Long-term production costs. 4. Revenue and profit. The profit maximization rule. | 2/2 | 2/2 | 6/6 | O (1-4) D (8-13) |
| Topic 8. Perfect competition market. 1. Signs and conditions of perfect competition. Demand for a firm's products under conditions of perfect competition. 2. Profit maximization. 3. The behavior of a perfect competitor in the short term. 4. Market of perfect competition in the long term. | 4/- | 4/2 | 4/10 | O (1-4) D (8-13) |
| Topic 9. Monopoly market 1. Pure monopoly and monopoly power. Demand for monopoly products. 2. Maximization of monopoly profit 3. Monopolistic pricing. 4. Price discrimination. 5. Comparative analysis of competition and monopoly. The social cost of monopoly. | 4/- | 2/- | 4/10 | O (1-4) D (8-13) |
| Topic 10. Monopolistic competition and oligopoly. 1. Monopolistic competition. 2. Oligopoly: game theory and strategic behavior in an oligopolistic market. 3. Duopoly models 4. Cartel. 5. Broken demand curve model. 6. Dominant firm model. 7. Measuring monopoly power. Antitrust policy. | 6/- | 2/- | 8/16 | O (1-4) D (8-13) |
| Topic 11. Formation of derived demand. Labor market. 1. Features of factor markets. 2. Demand for labor. Firm's hiring decisions. 3. Individual and market supply of labor. 4. Market equilibrium. Economic rent. | 4/- | 2/- | 6/12 | O (1,2,4) D (8-13) |
| Topic 12. Capital market. Introduction to investment decision analysis Land market. 1. Capital. Choice over time. 2. Supply of loan funds. Theory of intertemporal choice. 3. Investment demand. The concept of discounted value. 4. Land market. | 2/- | 2/- | 8/12 | O (1,2,4) D (8-13) |
| Topic 13. General equilibrium and economic efficiency. The state in microeconomic theory: externalities and public goods 1. General efficiency and general equilibrium. 2. Efficiency and fairness. The Lorenz curve. | 4/- | 2/- | 6/12 | O (1,2,4) D (8-10,12,13) |

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|---|-----------|-----------|-----------|--|
| 3. Reasons for market inefficiency. The economic role of the state in a market economy. | | | | |
| 4. Externalities. | | | | |
| 5. Public goods and public choice. | | | | |
| TOTAL | 44 | 30 | 76 | |

4. TEACHING AND TRAINING METHODS

| LOEC | Teaching methods (work to be done by the teacher <u>during classroom sessions</u> , consultations) | Learning methods (what types of learning activities should be performed by <u>the student independently</u>) |
|---|--|--|
| LOEC1: understand the basic concepts and categories of microeconomic theory, as well as the problems it explores | Lectures using presentations and interactive surveys Group case study discussions | Study of literature Preparation for quizzes and tests Completing online tests |
| LOEC2: understand the main types of market structures and the characteristics of economic agents' behavior in goods markets and factor markets | Lectures with discussion of real-life examples Group discussions on the analysis of market structures Simulation games (goods market) | Analysis of scientific articles Completing assignments on the Coursera platform Preparation of presentations on market structure analysis |
| LOEC3: Understand the theory of general equilibrium and efficiency, the causes of market failure, and the need for government intervention in the functioning of markets | Lectures with discussion elements Analysis of case studies of government intervention Debates on the role of the state in a market economy | Reading scientific articles Completion of written assignments and essays Development of own case studies on state intervention |
| LOEC4: finding optimal solutions for economic agents in goods and resource markets (consumer optimum, profit maximization and cost minimization for firms, hiring decisions, setting optimal prices by monopolists) | Practical classes using mathematical models Solving problems in small groups Interactive simulations using software | Preparation of analytical reports Use of software for modeling optimal solutions |
| LOEC5: analyze the consequences of violations of perfect competition conditions for consumers, producers, and society as a whole | Lectures using interactive polls Discussion of video materials (documentary films, speeches by economists) Group projects | Analysis of data from markets in different countries Preparation of reports and presentations Completing online tests on the Moodle platform |
| LOEC6: draw conclusions about the feasibility of investments based on net present value calculations | Lecture, practical class, discussion | Study of theoretical material, completion of calculation tasks |

5. Summative assessment

5.1.1. To assess the expected learning outcomes, the following is provided

| No | Methods of summative assessment | Points / Weight in the overall assessment | Date of completion |
|----|---|---|-----------------------------------|
| 1. | IND | 20/20 | Up to week 13 |
| 2. | IR 1 (individual calculation task) | 10 | Up to week 7 |
| 3. | IR 2 (individual calculation task) | 10/10 | By week 13 |
| 4. | Testing (module 1) | 10 | Week 7 |
| 5. | Testing (module 2) | 20 | Week 14 |
| 6. | Exam (written answers to open-ended questions and completion of a practical calculation task) | 30 | According to the session schedule |

5.1.2. Evaluation criteria

| Component | Criterion | Unsatisfactory | | Satisfactory | | Good | | Excellent |
|-----------|----------------------|---|---|---|--|---|---|--|
| | | <7 points | 8-10 points | 11-12 points | 13-14 points | 15-16 points | 17-18 points | 19-20 points |
| IND | <i>Understanding</i> | Complete lack of understanding of the topic. | Very limited understanding of basic concepts. Unable to adequately explain even basic ideas. | Superficial understanding without deep analysis. | Adequate understanding with some details. | Good understanding with clarity of basic ideas. | Very good understanding with critical analysis. | Excellent deep understanding with full coverage of the topic. |
| | <i>Analysis</i> | No analysis whatsoever. No sources used. | Elementary analysis without any attempt to link to sources. | Insufficient analysis, but with some valid observations. | Superficial analysis with some original insights. | Sufficient analysis using relevant sources. | Detailed analysis with deep understanding. | High-quality critical analysis with innovative ideas. |
| | <i>Argumentation</i> | Lack of argumentation. No structure or connection between ideas. | Very weak argumentation. Ideas are not substantiated and poorly presented. | Superficial argumentation, but sufficient to understand the main points. | Clear arguments, but with limited persuasiveness. | Strong arguments with good structure. | Very strong, convincing arguments with a critical approach. | Exceptional arguments with a high level of originality. |
| | <i>Formatting</i> | Serious violations of academic standards. The text is difficult to read due to numerous errors. | Significant violations of academic standards. Many errors that make comprehension difficult. | Errors are present, but the text is understandable. | Minor errors, good structure. | Very good formatting with minimal errors. | Almost perfect formatting. | Perfect formatting without errors. |
| IR 1 | | 0 points | 1-2 points | 3-4 points | 5-6 points | 7-8 points | 9 points | 10 points |
| | Task missing | | 1 point. The work contains critical errors that make it impossible to evaluate. 2 points. A minimal part of the tasks has been completed, but with errors. There | 3 points. Basic tasks have been completed, but there are errors in the calculations and the equilibrium point has been incorrectly determined. 4 points. | 5 points. The main tasks have been completed, graphs and tables are present, but the analysis is superficial and there are errors in determining the | 7 points. Good performance of tasks with clear and accurate graphs and tables. The data analysis is complete but could be | Excellent completion of tasks with exceptional data analysis. The work includes accurate and detailed analysis with correct | Exceptional performance with in-depth analysis of all aspects of the task, including accurate determination of the effects of taxes and subsidies, analysis of |

| | | | | | | | |
|----------------|--|---|---|---|--|---|--|
| | | are no graphs, and the tables contain significant inaccuracies. | Insufficient detail in the graphic representation . | equilibrium price and volume. 6 points. The tasks have been completed correctly with minor errors, the graphs and tables are accurate, and the equilibrium price and volume have been determined correctly. | improved. 8 points. Very good performance of tasks with in-depth and systematic analysis. High-quality graphs and tables. | calculations of surpluses and elasticity, showing the effects of taxes and subsidies. | equilibrium changes, without errors. |
| IR 2 | <i>0 points</i> | <i>1-2 points</i> | <i>3-4 points</i> | <i>5-6 points</i> | <i>7-8 points</i> | <i>9 points</i> | <i>10 points</i> |
| | Task missing | <i>1 point.</i> The work contains critical errors that make it impossible to evaluate. Basic calculations and graphical representations are missing. <i>2 points.</i> A minimal part of the tasks has been completed. There are no graphs, and the tables contain significant inaccuracies. | <i>3 points.</i> Significant errors in the calculations of basic economic indicators; graphs are missing. <i>4 points.</i> The main indicators have been calculated, but with errors that affect the accuracy of the conclusions. Attempts at graphical representation are present, but contain significant inaccuracies. | <i>5 points.</i> Basic calculations have been performed, but there are errors; graphs are present, but do not fully reflect changes in indicators. <i>6 points.</i> The work contains all the necessary calculations with minor errors. Graphs are present but require clarification to fully reflect the economic situation. | <i>7 points.</i> The calculations are correct, but the analysis is superficial; the graphs are correct, but contain minor errors. <i>8 points.</i> Correct calculations and analysis of key indicators; graphs are correct but contain minor errors. | In-depth analysis of economic indicators with high accuracy of calculations; excellent graphical representation with a detailed comparison of marginal and average costs. | Exceptional analysis with perfect calculations of all indicators; high originality and innovative approach to graphical representation of data, providing an in-depth analysis of the company's economic strategy. |
| Testing | <i>The number of points is determined by the number of correct answers</i> | | | | | | |
| Exam | <15 points | 15-24 points | | 25-29 points | | 30 | |
| | Theoretical questions are not fully disclosed, practical tasks are not completed | Theoretical questions have not been fully answered, practical task has been completed with minor errors | | All requirements of the task have been fulfilled | | All requirements for the task have been fulfilled, own opinion | |

5. 2. Formative assessment:

To assess current progress in learning and understanding areas for further improvement, the following is provided

| No | Elements of formative assessment | Date |
|----|---|----------------------------------|
| 1 | Testing in (Kahoot / Quizizz / Moodle) | At the end of each topic, module |
| 2 | Filling out self-assessment information | At the end of the relevant topic |

| | | |
|---|--|---------------------------------------|
| 3 | Completing tasks in the Learnings App | Upon completion of the relevant topic |
| 4 | Written feedback on the essay | Within 1 week after completion |
| 5 | Quest | Upon completion of the relevant topic |
| 6 | Verbal feedback from the teacher during the completion of the IR | During the completion of the IR |

5.3. Assessment scale used at the University:

| Total points for all types of academic activities | Assessment according to the national scale | |
|---|--|---|
| | For exams, course projects (papers), internships, qualification papers | for credit |
| 90 – 100 | excellent | pass |
| 82 | good | |
| 75-81 | | |
| 69-74 | satisfactory | |
| 60-68 | | |
| 35-59 | unsatisfactory with the possibility of retaking | not counted with the possibility of retaking |
| 0 | unsatisfactory with mandatory retake of the course | not counted with mandatory retaking of the course |

6. EDUCATIONAL RESOURCES (LITERATURE)

6.1. Main sources

6.1.1. Textbooks/manuals

1. Pylypenko V.V., Pylypenko N.M. Microeconomics. Study guide. Sumy: 2020. 391 p.
2. Microeconomic Theory: Textbook / Edited by: G.I. Bashnyanin, O.R. Zavyalova, O.O. Perepelykina. 3rd edition, revised and supplemented. Lviv: "Novyi Svit 2000," 2023. 391 p.
3. Microeconomics Course: Textbook for Students Majoring in Economics, Accounting and Taxation, Management, Marketing, Business, Trade, and Stock Exchange Activities / Edited by S.I. Arkhieieva. Kharkiv: Ivanchenko I.S. Publishing House, 2019. 156 p. <https://cutt.ly/ceoKJmrV>
4. Microeconomics: Textbook / N.M. Kameneva, M.V. Kosych, O.Yu. Aleksandrova et al. Kharkiv: UkrDUZT, 2022. 305 p. <https://cutt.ly/BeoKHRe3>
5. Pindyk R.S., Rubinfeld D.L. Microeconomics / Translated from English by A. Oliynyk, R. Skilsky K.: Osnovy, 1996.

6.1.2. Methodological support

6. Pylypenko N.M. Microeconomics. Lecture notes for first-year students of the first (bachelor's) level of higher education in full-time and part-time forms of training in the field of study 07 "Management and Administration" / Sumy, Sumy National Agrarian University, 2024. 102 p.
7. Pylypenko N.M., Pylypenko V.V. Microeconomics. Methodological guidelines for conducting practical classes for specialty 073 "Management," 1st year of full-time and part-time education / Sumy, Sumy National Agrarian University, 2024. 56 p.

8. Pylypenko N.M., Pylypenko V.V. Microeconomics. Methodological guidelines for independent work for specialty 073 "Management", 1st year of full-time and part-time education / Sumy, Sumy National Agrarian University, 2024. 77 p.
9. Pylypenko N.M., Pylypenko V.V. Microeconomics: methodological guidelines for conducting a quest for 1st year full-time and 2nd year part-time students majoring in 051 "Economics", 071 "Accounting and Taxation", 072 "Finance, Banking and Insurance", 073 "Management," 075 "Marketing," 076 "Entrepreneurship, Trade, and Exchange Activities," 281 "Public Management and Administration"/ Sumy, Sumy National Agrarian University, 2022 – 17 p.
10. E-course "Microeconomics." URL: <https://cdn.snau.edu.ua/moodle/course/view.php?id=2471>

6.2. Additional sources

11. Microeconomics: Textbook. Edited by S.V. Boida. Chernivtsi: Chernivtsi National University, 2021. 176 p. https://repository.ldufk.edu.ua/bitstream/34606048/32651/1/Mikroeconomic_2021.pdf
12. Microeconomics. Training Course: Textbook / [V.P. Reshetylo, A.E. Achkasov, I.A. Ostrovsky, S.B. Timofeeva]; Kharkiv National University of Municipal Economy named after O.M. Beketov. 2nd ed., rev. and supp. Kharkiv: O. M. Beketov National University of Urban Economy, 2017. 265 p. <http://eprints.kname.edu.ua/44492/1/2016%20%20%D0%BF%D0%B5%D1%87.%2011%D0%9D.pdf>
13. Petrushenko, Yu. M. Microeconomics: Theory and Examples of Problem Solving: Textbook for Students of Higher Educational Institutions Studying in the Educational and Professional Program of Bachelor's Degree in the Field of Knowledge "Economics and Entrepreneurship." Sumy: University Book, 2012. 319 p. http://www.dut.edu.ua/uploads/1_1387_99093157.pdf

6.3. Software

Standard MS Office application packages

6.4. Information resources:

14. Official web portal of the State Statistics Service of Ukraine/ URL: <http://www.ukrstat.gov.ua/>
15. Official website of the State Institution "Institute of Economics and Forecasting of the National Academy of Sciences of Ukraine". URL: <http://ief.org.ua/>
16. Official website of the Institute for Society Transformation (leading non-governmental scientific and analytical center in Ukraine). URL: <http://ist.osp-ua.info/>
17. Official website of the Alexander Razumkov Ukrainian Center for Economic and Political Studies. URL: <http://www.razumkov.org.ua/ukr>
18. Website of the European Union's statistical agency Eurostat – the most important constantly updated information on all sectors of the economy and social life of the 27 member states of the European Union. URL: <https://ec.europa.eu/eurostat>