



COURSE (MODULE) DESCRIPTION

| Course title | Code |
|-------------------|------|
| Economic Theory I | |

| Staff | Department |
|--|--|
| Coordinator: Dr. Justina Klimavičiūtė Other(s): Dr. Andrius Kažukauskas | Faculty of Economics and Business Administration |

| Study cycle | Course type |
|--------------------|-------------|
| First (Bachelor's) | Compulsory |

| Form of implementation | Period of implementation | Language of instruction |
|------------------------|--------------------------|-------------------------|
| Face-to-face | Semester 3 | English |

| Requirements for student | |
|---|--|
| Prerequisites: Principles of Economics | Additional requirements (if any): |

| Number of ECTS credits | Student's workload | Contact hours | Individual work |
|------------------------|--------------------|---------------|-----------------|
| 10 | 261 | 73 | 188 |

| Purpose of the course and competences developed | | |
|--|--|--|
| To provide students with a thorough understanding of core concepts and methods of microeconomics, as a foundation for subsequent study of microeconomic topics within the degree programme, and as one of the key elements in the professional training of an economist. | | |
| Learning outcomes (corresponding learning outcomes of the programme) | Teaching methods | Assessment methods |
| Have acquired knowledge in main microeconomic concepts and ideas and are able to apply them when analyzing economic problems. (1.1) | Lectures and lecture notes, tutorials, classroom discussion. | Two midterm tests and the final exam consisting of problems and multiple-choice questions. |
| Appreciate assumptions and limitations of microeconomic models when they are applied to the real world problems. (3.1) | Lectures and lecture notes, tutorials. | |
| Competence in using microeconomic methods and interpreting economic models. (3.2) | Lectures, tutorials, exercise solving. | |
| Construct logical and coherent arguments using economic concepts and develop economic thinking, as well as communicate ideas in a clear manner through written, graphical, and oral forms. (4.2) | Lectures, tutorials, classroom discussion, midterm tests. | |

| Course themes | Contact / Individual work: time and assignments | | | | | | | | Assignments due date |
|--|---|-----------|----------|-------------------|-----------------|----------|---------------|-----------------|---|
| | Lectures | Tutorials | Seminars | Practical classes | Laboratory work | Practice | Contact hours | Individual work | |
| MICROECONOMIC PART: | | | | | | | | | |
| 1. Consumer theory, Part 1: <ul style="list-style-type: none"> Consumer's optimization problem: <i>budget constraint, preferences, utility function, indifference curves, marginal rate of substitution, marginal utility, utility maximization, indirect utility function, expenditure function, Marshallian and Hicksian demand, Roy's identity.</i> Comparative statics of consumer demand: <i>income offer and Engel curves, price offer curves, Slutsky equation and its analysis.</i> Consumer's problem with endowments in the budget constraint. | 5 | 2 | | | | | 7 | 20 | Readings: [V1] Ch.2-6, [V2] Ch.7-9. |
| 2. Consumer theory, Part 2: <ul style="list-style-type: none"> Revealed preference. Compensating and equivalent variations and consumer surplus. Market demand. Uncertainty, risk aversion and insurance. Going beyond the standard theory. | 6 | 3 | | | | | 9 | 22 | Readings: [V1] Ch.7, Ch.12, Ch.15, [V2] Ch.10-11, [B] Ch.3. |
| 3. Production theory: <ul style="list-style-type: none"> Technology: <i>production set, production function, isoquants, marginal product, technical rate of substitution, returns to scale.</i> Profit maximization: <i>profit maximization problem, profit function, Hotelling's lemma.</i> Cost theory: <i>cost minimization problem, cost function, isocosts, conditional factor demand functions, Shephard's lemma, cost curves.</i> | 3 | 2 | | | | | 5 | 12 | Readings: [V1] Ch.19-22, [V2] Ch.1-5. |
| Midterm test 1 (topics 1-3) | 2 | | | | | | 2 | 8 | |
| 4. Competitive markets: Firm supply in the short and long-run, industry supply in the short and long-run. | 2 | 1 | | | | | 3 | 8 | Readings: [V1] Ch.23-24, Ch.16 [V2] Ch.13. |
| 5. Monopoly: Monopoly profit maximization, price discrimination, monopolistic competition, monopsony. | 3 | 2 | | | | | 5 | 12 | Readings: [V1] Ch.25-27, [V2] Ch.14. |

| | | | | | | | | | | |
|--|-----------|-----------|--|--|--|--|--|-----------|------------|---|
| 6. Oligopoly: Cournot and Bertrand models, quantity and price leadership, collusion. | 3 | 2 | | | | | | 5 | 12 | Readings: [V1] Ch.28. |
| 7. General equilibrium with pure exchange: Edgeworth box, Pareto efficient allocations, Walrasian equilibrium, Walras' law, First and Second theorems of welfare economics. | 3 | 1 | | | | | | 4 | 11 | Readings: [V1] Ch.32. |
| 8. General equilibrium with production: Robinson Crusoe economy, production possibilities, comparative advantage, Pareto efficiency. | 3 | 2 | | | | | | 5 | 12 | Readings: [V1] Ch.33. |
| 9. Social welfare: Aggregation of preferences, social welfare functions, welfare maximization. | 2 | 1 | | | | | | 3 | 9 | Readings: [V1] Ch.34. |
| 10. Externalities and public goods: <ul style="list-style-type: none"> • Externalities: <i>Coase theorem, private and social costs, Pigouvian taxes and subsidies, the tragedy of the commons.</i> • Public goods: <i>Pareto efficient provision of public goods, "free-riding" problem.</i> | 6 | 3 | | | | | | 9 | 21 | Readings: [V1] Ch.35, Ch.37, [B] Ch.4, Ch. 6. |
| Midterm test 2 (topics 7-10) | 2 | | | | | | | 2 | 8 | |
| 11. Asymmetric information: Adverse selection, moral hazard, signaling, incentives. | 3 | 2 | | | | | | 5 | 12 | Readings: [V1] Ch.38, [V2] Ch.25, [B] Ch.7. |
| 12. Game theory and applications: <ul style="list-style-type: none"> • Dominant strategies vs. dominated strategies • Strongly dominated strategies vs. weakly dominated strategies • Iterative deletion of dominated strategies • Best response • Dominant strategy equilibrium vs. Nash equilibrium. • Pure strategies vs. mixed strategies | 6 | 2 | | | | | | 8 | 21 | Readings: Lecture notes, [V1] Ch.29-30, [B] Ch.1. |
| | | | | | | | | | | |
| Exam review session | | 1 | | | | | | 1 | | |
| Total | 48 | 25 | | | | | | 73 | 188 | |

| Assessment strategy | Weight % | Deadline | Assessment Criteria |
|--|-----------------|---------------------|--|
| Midterm test 1 (topics 1-3) | 20 % | During the semester | The test consists of problems and multiple-choice questions covering the material of topics 1-3. The test is graded at the 10-point scale; in the final grade calculation, the test grade is multiplied by 0.2. Note: 1 extra point can be earned for active participation in class discussion of topics 1-6. |
| Midterm test 2 (topics 7-10) | 20 % | During the semester | The test consists of problems and multiple-choice questions covering the material of topics 7-10. The test is graded at the 10-point scale; in the final grade calculation, the test grade is multiplied by 0.2. Note: 1 extra point can be earned for active participation in class discussion of topics 7-12. |
| Final exam (all topics) | 60 % | Exam session | The exam consists of problems and multiple-choice questions covering the material of all the topics. The exam is graded at the 10-point scale; in the final grade calculation, the exam grade is multiplied by 0.6. |
| Final grade = 0.2*(Midterm1 grade) + 0.2*(Midterm2 grade) + 0.6*(Final exam grade) | | | |

| Author | Publishing year | Title | Issue No or volume | Publishing house or Internet site |
|---------------------------------|------------------------|--|---------------------------|---|
| Required reading | | | | |
| [V1] Varian H.R. | 2014 | Intermediate Microeconomics: A Modern Approach | 9th Edition | W. W. Norton & Company |
| [V2] Varian H.R. | 1992 | Microeconomic Analysis | 3rd Edition | W. W. Norton & Company |
| [B] Bowles S. | 2006 | Microeconomics: Behavior, Institutions and Evolution | | Princeton University Press Available online: https://ebookcentral.proquest.com/lib/viluniv-ebooks/home.action |
| Optional reading | | | | |
| Osborne M. J. and Rubinstein A. | 2020 | Models in Microeconomic Theory | | Open Book Publishers Available online: https://www.openbookpublishers.com/product/1159 https://www.openbookpublishers.com/product/1171 |