



### COURSE UNIT (MODULE) DESCRIPTION

Course unit (module) title	Code
Economic Theory I	Confirmed on May 15, 2024

Academic staff	Core academic unit(s)
<b>Coordinator:</b> Dr. Justina Klimavičiūtė <b>Other(s):</b> Dr. Andrius Kažukauskas	Faculty of Economics and Business Administration

Study cycle	Type of the course unit
First (Bachelor's)	Compulsory

Mode of delivery	Semester or period when it is delivered	Language of instruction
Face-to-face	Semester 3	English

Requisites	
<b>Prerequisites:</b> Principles of Economics	Co-requisites (if relevant):

Number of ECTS credits allocated	Student's workload (total)	Contact hours	Individual work
10	260	72	188

Purpose of the course unit		
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 of the course unit (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
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	Lectures	Tutorials	Seminars	Workshops	Laboratory work	Internship	Contact hours, total	Individual work	Tasks for individual work
<b>MICROECONOMIC PART:</b>									
<b>1. Consumer theory, Part 1:</b> <ul style="list-style-type: none"> <li>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></li> <li>Comparative statics of consumer demand: <i>income offer and Engel curves, price offer curves, Slutsky equation and its analysis.</i></li> <li>Consumer's problem with endowments in the budget constraint.</li> </ul>	5	2					7	20	Readings: [V1] Ch.2-6, [V2] Ch.7-9.
<b>2. Consumer theory, Part 2:</b> <ul style="list-style-type: none"> <li>Revealed preference.</li> <li>Compensating and equivalent variations and consumer surplus.</li> <li>Market demand.</li> <li>Uncertainty, risk aversion and insurance.</li> <li>Going beyond the standard theory.</li> </ul>	6	3					9	22	Readings: [V1] Ch.7, Ch.12, Ch.15, [V2] Ch.10-11, [B] Ch.3.
<b>3. Production theory:</b> <ul style="list-style-type: none"> <li>Technology: <i>production set, production function, isoquants, marginal product, technical rate of substitution, returns to scale.</i></li> <li>Profit maximization: <i>profit maximization problem, profit function, Hotelling's lemma.</i></li> <li>Cost theory: <i>cost minimization problem, cost function, isocosts, conditional factor demand functions, Shephard's lemma, cost curves.</i></li> </ul>	3	2					5	12	Readings: [V1] Ch.19-22, [V2] Ch.1-5.
<b>Midterm test 1 (topics 1-3)</b>	2						2	8	
<b>4. Competitive markets:</b> 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.
<b>5. Monopoly and monopolistic behaviour:</b> Monopoly profit maximization, price discrimination, monopolistic competition, monopsony.	3	2					5	12	Readings: [V1] Ch.25-27, [V2] Ch.14.
<b>6. Oligopoly:</b> Cournot and Bertrand models, quantity and price leadership, collusion.	3	2					5	12	Readings: [V1] Ch.28.
<b>7. General equilibrium with pure exchange:</b> Edgeworth box, Pareto efficient allocations, Walrasian equilibrium, Walras' law, First and Second theorems of welfare	3	1					4	11	Readings: [V1] Ch.32.

economics.									
<b>8. General equilibrium with production:</b> Robinson Crusoe economy, production possibilities, comparative advantage, Pareto efficiency.	3	2					5	12	Readings: [V1] Ch.33.
<b>9. Social welfare:</b> Aggregation of preferences, social welfare functions, welfare maximization.	2	1					3	9	Readings: [V1] Ch.34.
<b>10. Externalities and public goods:</b> <ul style="list-style-type: none"> <li>Externalities: <i>Coase theorem, private and social costs, Pigouvian taxes and subsidies, the tragedy of the commons.</i></li> <li>Public goods: <i>Pareto efficient provision of public goods, "free-riding" problem.</i></li> </ul>	6	3					9	21	Readings: [V1] Ch.35, Ch.37, [B] Ch.4, Ch. 6.
<b>Midterm test 2 (topics 7-10)</b>	2						2	8	
<b>11. Asymmetric information:</b> Adverse selection, moral hazard, signaling, incentives.	3	2					5	12	Readings: [V1] Ch.38, [V2] Ch.25, [B] Ch.7.
<b>12. Game theory and applications:</b> <ul style="list-style-type: none"> <li>Dominant strategies vs. dominated strategies</li> <li>Strongly dominated strategies vs. weakly dominated strategies</li> <li>Iterative deletion of dominated strategies</li> <li>Best response</li> <li>Dominant strategy equilibrium vs. Nash equilibrium.</li> <li>Pure strategies vs. mixed strategies</li> </ul>	6	2					8	21	Readings: Lecture notes, [V1] Ch.29-30, [B] Ch.1.
<b>Total</b>	<b>48</b>	<b>24</b>					<b>72</b>	<b>188</b>	

Assessment strategy	Weight %	Deadline	Assessment criteria
Midterm test 1 (topics 1-3)	20 %	During the semester	<p>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.</p> <p>Note: 1 extra point can be earned for active participation in class discussion of topics 1-6.</p>
Midterm test 2 (topics 7-10)	20 %	During the semester	<p>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.</p> <p>Note: 1 extra point can be earned for active participation in class discussion of topics 7-12.</p>

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 (-s)	Publishing year	Title	Issue no or volume	Publishing house or web link
<b>Required reading</b>				
[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: <a href="https://ebookcentral.proquest.com/lib/viluniv-ebooks/home.action">https://ebookcentral.proquest.com/lib/viluniv-ebooks/home.action</a>
<b>Recommended reading</b>				
Osborne M. J. and Rubinstein A.	2020	Models in Microeconomic Theory		Open Book Publishers  Available online: <a href="https://www.openbookpublishers.com/product/1159">https://www.openbookpublishers.com/product/1159</a>  <a href="https://www.openbookpublishers.com/product/1171">https://www.openbookpublishers.com/product/1171</a>