

# Course descriptions

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## COURSE DESCRIPTION

<b>Academic year:</b> 2023/2024					
<b>University:</b> Comenius University Bratislava					
<b>Faculty:</b> Faculty of Social and Economic Sciences					
<b>Course ID:</b> FSEV.ÚE/1-UE-980/22		<b>Course title:</b> Applied Statistics			
<b>Educational activities:</b> <b>Type of activities:</b> lecture + seminar / lecture <b>Number of hours:</b> <b>per week:</b> 2 / 2 <b>per level/semester:</b> 28 / 28 <b>Form of the course:</b> combined					
<b>Number of credits:</b> 6					
<b>Recommended semester:</b> 3.					
<b>Educational level:</b> I.					
<b>Prerequisites:</b>					
<b>Course requirements:</b> The project is worth 50 % of the final grade and the final exam is worth 50 % of the final grade. The evaluation scale is as follows: A 100 – 91; B 90 – 81; C 80 – 71; D 72 – 61; E 60 – 51; FX less than 50.					
<b>Learning outcomes:</b> After successful completion of the course, the participant will be able to apply intermediate statistical methods, to economic data.					
<b>Class syllabus:</b> 1. Data collection. 2. Numerical description of data. 3. Graphical description of data. 4. Applied probability. 5. Hypothesis testing. 6. Correlation analysis. 7. Projects.					
<b>Recommended literature:</b> Pacáková a kol. (2003): Štatistika pre ekonómov. DeGroot and Schervish (2012): Probability and Statistics.					
<b>Languages necessary to complete the course:</b>					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 60					
A	B	C	D	E	FX
18,33	18,33	30,0	11,67	18,33	3,33
<b>Lecturers:</b> Peter Knížat, MSc.					

<b>Last change:</b> 09.10.2023
<b>Approved by:</b>

## COURSE DESCRIPTION

<b>Academic year:</b> 2023/2024	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Social and Economic Sciences	
<b>Course ID:</b> FSEV.ÚE/1-UE-990/22	<b>Course title:</b> Bachelor Practice
<b>Educational activities:</b> <b>Type of activities:</b> lecture + seminar / lecture <b>Number of hours:</b> <b>per week:</b> 2 / 2 <b>per level/semester:</b> 28 / 28 <b>Form of the course:</b> combined	
<b>Number of credits:</b> 6	
<b>Recommended semester:</b> 4.	
<b>Educational level:</b> I.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> Professional internships are only possible in institutions with which FSES UK has concluded a Partnership Agreement or a Professional Internship Agreement. In accordance with the contractual conditions, the student's task will be to identify problems relevant to research in the field of applied economics. Research issues should be based on the agenda of the unit where the traineeship takes place. In addition, the student will be involved in administrative tasks and get acquainted with the professional issues of a particular department of the host partner institution, according to the internship plan. The internship will include the student's work to the necessary extent, max. 4 hours a day for the entire duration of the placement, at the place of residence or workplace of the partner institution. Each candidate for the internship will submit a recommendation of a study advisor to the partner institution, resp. pedagogue. Students can submit their applications throughout the year through the teacher. The student's output is a report on the internship, in which the student describes the workload of the internship and specific problems related to the agenda he worked with and are relevant to research in the field of applied economics.	
<b>Learning outcomes:</b> At the end of the internship, the guarantor of the partner institution will prepare an evaluation of the student's internship. The assessment will include the duration of the placement, a description of the specific activities that the student has performed during the placement (specific administrative and professional activities), as well as the quality of the work performed, responsibility, improvement of knowledge and skills). The evaluation is the basis for recognition of the FSEV UK internship. As a result, he will be able to prepare qualified economic documents for business practice.	
<b>Class syllabus:</b> Preparation for the creation of qualified economic data for the needs of economic practice at the enterprise level as well as scientific research.	
<b>Recommended literature:</b>	
<b>Languages necessary to complete the course:</b>	
<b>Notes:</b>	

<b>Past grade distribution</b>					
Total number of evaluated students: 49					
A	B	C	D	E	FX
95,92	2,04	0,0	0,0	0,0	2,04
<b>Lecturers:</b> doc. RNDr. Eduard Hozlár, CSc.					
<b>Last change:</b> 09.10.2023					
<b>Approved by:</b>					

## COURSE DESCRIPTION

<b>Academic year:</b> 2023/2024	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Social and Economic Sciences	
<b>Course ID:</b> FSEV.ÚE/1-AE-400/14	<b>Course title:</b> Banking
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week:</b> 2 / 2 <b>per level/semester:</b> 28 / 28 <b>Form of the course:</b> combined	
<b>Number of credits:</b> 6	
<b>Recommended semester:</b> 5.	
<b>Educational level:</b> I.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> During the term there will be two control written works (together 20 points), two presentations of actual banking topics (each 5 points), the first topic to be presented till the 6th week of the term, the second topic within 7-11th week. Other activities: 10 points. Final written exam (60 points). Hodnotenie A B C D E FX body 91-100 81-90 73-80 66-72 60-65 <59	
<b>Learning outcomes:</b> To get knowledge on how banks operate in economy; financial market regulation; risks in banking; liability and asset management; new trends in banking.	
<b>Class syllabus:</b> <ul style="list-style-type: none"> <li>• Banking and the Financial Services.</li> <li>• Financial Market Regulation.</li> <li>• Financial Institutions and Money Market.</li> <li>• Bank Organizational Structure.</li> <li>• Bank Risks.</li> <li>• Analysing Bank Performance.</li> <li>• Asset and Liability Management.</li> <li>• Money Emission.</li> <li>• Off-Balance-Sheet Activities.</li> <li>• Payment and Settlement.</li> <li>• Factoring, Forfaiting, Leasing.</li> </ul>	
<b>Recommended literature:</b> KOCH, T.W., MACDONALD, S. S.: Bank Management. South-Western College Pub, 8th Edition. ISBN: 978-1133494683. MISHKIN, S. F.: The Economics of Money, Banking and Financial Markets. PEARSON, 11th Edition. ISBN: 978-1-292-09418-2. DVOŘÁK, P.: Bankovníctví pro bankéře a klienty. LINDE, Praha, 2005. ISBN: 80-7201-515-X.	

Journals: BIATEC (published by NBS in Bratislava); Bankovníctví (published by ECONOMIA in Prague).  
Laws, Measures, Regulations.  
www.nbs.sk

**Languages necessary to complete the course:**  
Slovak, English

**Notes:**

**Past grade distribution**

Total number of evaluated students: 260

A	B	C	D	E	FX
8,46	13,85	20,38	22,69	32,69	1,92

**Lecturers:** Ing. Mária Širaňová, PhD.

**Last change:** 11.03.2022

**Approved by:**

## COURSE DESCRIPTION

<b>Academic year:</b> 2023/2024	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Social and Economic Sciences	
<b>Course ID:</b> FSEV.ÚE/1-AE-920/22	<b>Course title:</b> Business Accelerator
<b>Educational activities:</b> <b>Type of activities:</b> lecture / seminar <b>Number of hours:</b> <b>per week:</b> 2 / 2 <b>per level/semester:</b> 28 / 28 <b>Form of the course:</b> combined	
<b>Number of credits:</b> 6	
<b>Recommended semester:</b>	
<b>Educational level:</b> I.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> Completion of all 4 phases, each with a value of 25 points. rating A B C D E Fx points 91-100 81-90 73-80 66-72 60-65 <59	
<b>Learning outcomes:</b> Students will test their ideas, build the MVP of their own product or service, get the know-how how to ask their customer for critical feedback. In terms of team management and people management, they will realize, how to work in short "sprints", set the KPIs, and iterate. Implement the feedback test and iterate again. This is the "new normal" in digital business. Since the sprints are usually designed for a period of weeks or months, they will gain the knowledge of how to work on short-term goals, adjust them and bring critical thinking to the business. This helps them to form an entrepreneurial mindset and see the opportunities around them. That's the key character for the future leaders, to see not the problems and "stops" but opportunities and potential solutions to them, see the thing from the other point of view. We are not saying the own business is the only way, but with this entrepreneurial mindset, they can be part of the future economy, which is focusing more on the projects and business approach. They can also create either part-time or full-time job, from the "side hustle".	
<b>Class syllabus:</b> Class syllabus: 1. Idea: Read the blog post "Intro to the startup world", written by the investment manager of Zero Gravity Capital fund. The "idea stage" is one of the critical parts of doing business. You need to describe the problem or the current state which is bothering you. Why is it bothering you? What are the existing solutions on the market? Are they doing it well? Can you improve them? Can you create your own niche? How unique is your idea? Can you compete with the existing solutions? What is your added value? Define the first target group and identify the test customer base. 2. First Validation: In this section, we will learn why you need to constantly iterate and analyze the idea since "day one". Not to waste your time doing the hard work for many weeks and months, in the "garage", before you are going to talk to the first customers. We will discuss and use the	

validation tools like brainstorming, user interviews, or questionnaire. With not much time effort and financial costs.

3. Startup Orientation: We will go through the industry orientation, how to follow the newest trends within the field, the competition, and the customer base. We will also cover how to legally establish the first company, how to split the shares, how to set up the founders' relationships and rules, how to deal with the employees or the contractors, and how to deal with the investors' groups

4. Prototyping: The first prototype of your business is the final goal of your first entrepreneurial journey. When you build it you have valuable data about your potential customers, feedback from them. Now, the work begins. You know what they want and you can leverage that to build the business for them, for your early adopters. We will show you, how to build it in the digital world, via designs, mockups, wireframes, or online documents. Then, you "just" need to do the work and sell the THING.

**Recommended literature:**

Recommended literature:

1) Ries, E. Lean Startup. Penguin Books. 2011. ISBN 0670921602

2) Isaacson, W. The Innovators. Simon & Schuster. 2015, ISBN 9781471138805

Resources within Startup Day: videos, lectures, custom expert blogs and articles.

**Languages necessary to complete the course:**

Slovak, English

**Notes:**

**Past grade distribution**

Total number of evaluated students: 39

A	B	C	D	E	FX
7,69	84,62	5,13	2,56	0,0	0,0

**Lecturers:** Ing. Viktor Stefanak

**Last change:** 30.06.2022

**Approved by:**

## COURSE DESCRIPTION

<b>Academic year:</b> 2023/2024	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Social and Economic Sciences	
<b>Course ID:</b> FSEV.ÚE/1-UE-950/22	<b>Course title:</b> Business Management
<b>Educational activities:</b> <b>Type of activities:</b> lecture + seminar / lecture <b>Number of hours:</b> <b>per week:</b> 2 / 2 <b>per level/semester:</b> 28 / 28 <b>Form of the course:</b> combined	
<b>Number of credits:</b> 6	
<b>Recommended semester:</b> 1.	
<b>Educational level:</b> I.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> Midterm evaluation 40% Final evaluation 60% Grades A B C D E Fx Points 91-100 81-90 73-80 66-72 60-65 <59	
<b>Learning outcomes:</b>	
<b>Class syllabus:</b> 1- Business, enterprise in a market economy. Establishment and emergence of a business, business environment, location, business objectives. 2- Typology of businesses, criteria for dividing businesses. 3- Typology of businesses by legal form: partnerships: general partnership , limited partnership . 4- Typology of businesses by legal form: corporations: limited liability company (s.r.o.), joint stock company (a.s.) and cooperative. 5- Transformation (production process) and production factors. Human resources, personnel scheduling. 6- Remuneration of employees. Basic and supplementary forms of wages. Wage calculation. 7- Business assets and sources of asset acquisition: importance of accounting documents: balance sheet, profit and loss statement. Determination of the financial result. 8- Long-term assets, type and classification. Importance of depreciation for tax depreciation. Practical examples of tax depreciation of long-term assets. 9- Current assets of the company, circulation and standardization of current assets. 10- Business costs, criteria for cost allocation and their importance. Business income. 11- Sales management - evaluation, sales. Sales tools - from the marketing point of view. 12- Financial management of the business, financial analysis.	
<b>Recommended literature:</b> Majdúchová H. a kol. 2018. Podnikové hospodárstvo. Majdúchová H. a kol. 2020. Podnikové hospodárstvo, príklady a prípadové štúdie. Majdúchová H., Neumannová A. 2014. Podnik a podnikanie.	

Act No. 513/1991 Commercial Code Act No. 595/2003 Income Tax Code Act No. 311/2001 Labor Code					
<b>Languages necessary to complete the course:</b>					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 101					
A	B	C	D	E	FX
9,9	17,82	20,79	7,92	31,68	11,88
<b>Lecturers:</b> Ing. Iveta Kufelová, PhD.					
<b>Last change:</b> 09.10.2023					
<b>Approved by:</b>					

## STATE EXAM DESCRIPTION

<b>Academic year:</b> 2023/2024	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Social and Economic Sciences	
<b>Course ID:</b> FSEV.ÚE/1-AE-SS3/18	<b>Course title:</b> Defence of Bachelor Final Thesis
<b>Number of credits:</b> 6	
<b>Educational level:</b> I.	
<b>Course requirements:</b> The bachelor thesis is evaluated by the supervisor, the opponent and the defense committee for the state final examinations. Out of a maximum of 100 points, at least 95 points are required for an A grade, at least 83 points for a B grade, at least 68 points for a C grade, at least 55 points for a D grade, and at least 50 points for an E grade.	
<b>Learning outcomes:</b> After successfully defending the thesis, the student will be able to formulate economic problems solved at the microeconomical or macroeconomical level as mathematical models, solve these models mathematically, and interpret the results of the solutions economically.	
<b>Class syllabus:</b> Preparation of the bachelor's thesis. 1. Preparation of a PowerPoint presentation on the methods and results of the bachelor's thesis. 2. Familiarization with the supervisor's and opponent's assessments and preparation of responses to them. 3. Defense of the bachelor's thesis before the state final examination committee.	
<b>State exam syllabus:</b>	
<b>Recommended literature:</b> Mathematical and economic literature as recommended by the supervisor of the bachelor's thesis.	
<b>Languages necessary to complete the course:</b> Slovak language and English language	
<b>Last change:</b> 09.10.2023	
<b>Approved by:</b>	

## COURSE DESCRIPTION

<b>Academic year:</b> 2023/2024	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Social and Economic Sciences	
<b>Course ID:</b> FSEV.ÚE/1-AE-320/14	<b>Course title:</b> Dynamic Programming
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week:</b> 2 / 2 <b>per level/semester:</b> 28 / 28 <b>Form of the course:</b> combined	
<b>Number of credits:</b> 6	
<b>Recommended semester:</b> 4., 6.	
<b>Educational level:</b> I.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> Two mid term tests for to 30 points during the semester and a final exam for of 40 points. Credits will not be given to a student who has earned less than 20 points from two written tests during the semester. The evaluation scale is as follows: A B C D E Fx 91-100 81-90 73-80 66-72 60-65 <59	
<b>Learning outcomes:</b> After successful completion of the course, the student will be able to formulate and solve multi-step economic decision-making problems (especially in the area of distribution of resources between the centers of organization, production, investment, innovation and advertising activity of monopoly and optimization of the supply process in conditions of non-stationary deterministic demand on inputs) programming with the final time horizon.	
<b>Class syllabus:</b> 1. Basic concepts of dynamic programming. Dynamic Programming for Finite-Horizon Optimal Control of Discrete-Time Systems 2. Bellman's principle of optimality. 3. Selected applications of discrete dynamic programming with a finite horizon: optimal resource allocation task, knapsack problem, optimal capacity allocation. 4. Deterministic dynamic programming in analysys of monopoly. 5. Model for a Non-Stationary Demand Process 5.1. Wagner's Whitin algorithm. 5.2. Heuristic task for periods selection for finite -time 5.3 Algorithm for tasks with an infinite time horizon, discounted future costs, and the end-of-life cycle of demand.	
<b>Recommended literature:</b> Laščiak, Adam a kolektiv: Dynamické modely. Bratislava, Alfa 1985, kapitola 1. Muckstadt, John A. - Sapro, Amar: Principlesoofinventorymanagement. Whenu you are down to four, order more. New York, Springer 2010, kapitola 4.	

Horniaček, Milan: "AnAlgorithmforInfiniteHorizonLotSizingwithDeterministicDemand,"  
Applied Mathematics, Vol. 5 No. 2, 2014, pp. 217-225. doi: 10.4236/am.2014.52023.

**Languages necessary to complete the course:**

Slovak language and English language

**Notes:**

**Past grade distribution**

Total number of evaluated students: 272

A	B	C	D	E	FX
18,38	20,59	22,43	15,07	17,28	6,25

**Lecturers:** doc. Ing. Karol Szomolányi, PhD.

**Last change:** 11.03.2022

**Approved by:**

## COURSE DESCRIPTION

<b>Academic year:</b> 2023/2024	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Social and Economic Sciences	
<b>Course ID:</b> FSEV.ÚE/1-AE-120/14	<b>Course title:</b> Econometrics
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week: 2 / 4 per level/semester: 28 / 56</b> <b>Form of the course:</b> combined	
<b>Number of credits:</b> 9	
<b>Recommended semester:</b> 4.	
<b>Educational level:</b> I.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> midterm exam for 20 points semestral project for 30 points oral exam 50 points hodnotenie A B C D E Fx body 91-100 81-90 73-80 66-72 60-65 <59	
<b>Learning outcomes:</b> Student gains knowledge about econometric modeling, testing and application of econometric models. The student is able to build, test and prognostically use a multiple variable linear model.	
<b>Class syllabus:</b> 1. The econometric model, 2. The simple linear regression model, 3. The multiple regression model, 4. The interval estimation and hypotheses testing, 5. The specification of the linear model, 6. The regression diagnostic: heteroscedasticity, autocorrelation, model specification errors, multicollinearity, 7. The prognostic application.	
<b>Recommended literature:</b> Hatrák, M. (2007) Ekonometria. IURA Edition, Bratislava Hill, R.C., Griffiths, W.E. and Judge, G.G. (2001) Undergraduate Econometrics. Wiley. Hill, R.C., Griffiths, W.E. and Lim, G.C. (2008) Principles of Econometrics. Wiley. Lukáčik, M. Lukáčiková, A., Szomolányi, K. (2011) Ekonometrické modelovanie v programoch Eviews a Gretl. Vydavateľstvo EKONÓM.	
<b>Languages necessary to complete the course:</b> Slovak language and English language	
<b>Notes:</b>	

<b>Past grade distribution</b>					
Total number of evaluated students: 307					
A	B	C	D	E	FX
15,96	14,01	17,92	16,94	18,89	16,29
<b>Lecturers:</b> Ing. Veronika Mit'ková, PhD.					
<b>Last change:</b> 09.10.2023					
<b>Approved by:</b>					

## STATE EXAM DESCRIPTION

<b>Academic year:</b> 2023/2024	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Social and Economic Sciences	
<b>Course ID:</b> FSEV.ÚE/1-AE-SS4/22	<b>Course title:</b> Economic Theory
<b>Number of credits:</b> 9	
<b>Educational level:</b> I.	
<b>Course requirements:</b> the exam is evaluated by the commission evaluation A B C D E Fx points 91-100 81-90 73-80 66-72 60-65 <59	
<b>Learning outcomes:</b> After successfully passing the state exam in economic theory, students are able to formulate microeconomic and macroeconomic problems solved at the level of businesses or within the framework of public authorities as mathematical models, to solve these models mathematically and to interpret the results of the solutions economically.	
<b>Class syllabus:</b> 1. Macroeconomic aggregates and the system of national accounts. Measurement of economic output. Gross domestic product and methods of measurement. Gross national product. Savings, taxes and investment. Measurement of inflation, employment and income. 2. Theory of economic growth. Measurement of the dynamics of economic growth. Full employment and potential GDP. Malthusian theory. Solow's growth model. 3. Scientific and technological progress and economic growth. Endogenous growth theory. Neoclassical growth theory. 4. Income equilibrium models and the multiplier. Solving problems defined in an open economy model. Short-run fluctuations. 5. Financial markets and aggregate demand. IS-LM Model of an open economy. Model formulation and graphical interpretation. 6. Model of economic fluctuations. Phillips curve. Aggregate demand and price adjustment. Price and demand shocks. Exchange rates and price level. 7. Legal regulations and institutions of the financial market. The role of regulators in financial markets. 8. Operations of commercial banks. The payment system. 9. Economic analysis of a bank (balance sheet, income statement, cash flow statement). Performance indicators of a bank. 10. Theory of consumer behavior. Consumer preferences and the existence of utility functions. Budget constraint. Formulation of the consumer problem and its analytical and graphical solutions. 11. Elasticity of individual and market demand. Types and properties of elasticity and economic interpretation. 12. Marginal utility and marginal rate of substitution. Properties of the optimal consumption strategy in the case of Cobb-Douglas preferences. 13. Modeling of the production process (production function and isoquant function) and marginal product, the set of production strategies and the set of efficient production strategies. Types of economies of scale and optimality of solutions.	

<p>14. Explain and derive the profit maximization problem of a firm under conditions of perfect competition. Profit maximization of a firm in the short and long run.</p> <p>15. Substitution between inputs in the production process and the marginal rate of technical substitution. The relationship between the technical substitution rate and the profit maximization of a firm.</p> <p>16. Cost functions (average cost, average variable cost, marginal cost) and their relationships. Short-run and long-run cost functions.</p> <p>17. Market structures under imperfect competition. Maximization of monopoly profit. Cournot's model and cartel, Stackelberg's model</p>
<p><b>State exam syllabus:</b></p>
<p><b>Recommended literature:</b></p> <p>Felderer, B. – Homburg, S.: Makroekonomika a nová makroekonomika. Elita, Bratislava 1995.</p> <p>Mlynarovič, V – V. Miťková.: Makroekonomická analýza, IURA Edition, Bratislava, 2010</p> <p>Pentecost, E., J.: Macroeconomics, MacMillan Press, Ltd., London, 2000.</p> <p>Varian, Hal R.: Microeconomic Analysis. New York, W.W. Norton &amp; Company 1992. Fendek, Michal: Kvantitatívna mikroekonómia. Bratislava, IURA Edition 1999.</p>
<p><b>Languages necessary to complete the course:</b></p> <p>Slovak language and English language</p>
<p><b>Last change:</b> 09.10.2023</p>
<p><b>Approved by:</b></p>

## COURSE DESCRIPTION

<b>Academic year:</b> 2023/2024					
<b>University:</b> Comenius University Bratislava					
<b>Faculty:</b> Faculty of Social and Economic Sciences					
<b>Course ID:</b> FSEV.ÚE/1-AE-240/14		<b>Course title:</b> Financial Engineering			
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week:</b> 2 / 2 <b>per level/semester:</b> 28 / 28 <b>Form of the course:</b> combined					
<b>Number of credits:</b> 6					
<b>Recommended semester:</b> 3.					
<b>Educational level:</b> I.					
<b>Prerequisites:</b>					
<b>Course requirements:</b>					
<b>Learning outcomes:</b> To present basic knowledge about structure, functions, institutions, instruments and management of financial markets. The subject is oriented to explain problem concerning of investment environment properties. It explains behavior of investment markets and basics of investment and its strategy					
<b>Class syllabus:</b> 1. Equities analysis (fundamental analysis, intrinsic value of a share, technical analysis, psychological analysis, and theories of effective markets). Bonds analysis (short term and long term instruments). Derivatives of securities (forwards, futures, options, swaps and combined instruments). 4. Instruments of collective investments {investment and mutual funds, pension funds					
<b>Recommended literature:</b> P. Jorion: Value at Risk. McGraw-Hill, New York, 1997 Mlynarovič V.: Finančné modelovanie. ES EU Bratislava, 1995 Mlynarovič, V.: Finančné investovanie. Teória a aplikácie. IURA Edition, 2001					
<b>Languages necessary to complete the course:</b>					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 273					
A	B	C	D	E	FX
11,72	13,55	27,84	18,32	23,08	5,49
<b>Lecturers:</b> doc. Ing. Vladimír Mlynarovič, CSc.					
<b>Last change:</b> 11.03.2022					
<b>Approved by:</b>					

## COURSE DESCRIPTION

<b>Academic year:</b> 2023/2024	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Social and Economic Sciences	
<b>Course ID:</b> FSEV.ÚM/1-ÚM-077/22	<b>Course title:</b> Fundamentals of Programming
<b>Educational activities:</b> <b>Type of activities:</b> seminar <b>Number of hours:</b> <b>per week: 4 per level/semester: 56</b> <b>Form of the course:</b> combined	
<b>Number of credits:</b> 6	
<b>Recommended semester:</b> 1.	
<b>Educational level:</b> I.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> During the semester, they hand in independently developed practical assignments based on problems solved during the seminars. The assignments result in an interim assessment during the semester with a maximum of 80 points. The time commitment for the independent assignments in conjunction with the study of the recommended literature is 4 hours per week. Students who score at least 60% of the maximum number of points (48 points) in the interim assessment will proceed to the final assessment in the form of a written or oral examination of the course with a score of 20 points. Grade: A: 91-100 points; B: 81-90 points; C: 73-80 points; D: 66-72 points; E: 60-65 points; Fx: 0-59 points.	
<b>Learning outcomes:</b> In this course, students are expected to learn the basics of algorithmization and the use of programming languages and concepts. They will become familiar with the basic syntax of their chosen languages and through them further develop the ability to think analytically, create algorithms and programs for computers, and solve algorithmizable problems through scripts and programs.	
<b>Class syllabus:</b> Algorithmization and programming. Basic data types and structures. Temporary and permanent memory, variables, file system. Sequential execution of commands. Conditions and loops, logical operators. Numerical operations. Reusability of code, functions, methods. Complex data structures. Objects and classes. Web APIs and their use. Code cleanliness, best practices, linting. Security aspects of algorithms. Errors and debugging.	
<b>Recommended literature:</b>	
<b>Languages necessary to complete the course:</b>	
<b>Notes:</b>	

<b>Past grade distribution</b>					
Total number of evaluated students: 101					
A	B	C	D	E	FX
31,68	12,87	14,85	11,88	9,9	18,81
<b>Lecturers:</b> Mgr. Juraj Grečnár, PhD.					
<b>Last change:</b> 31.12.2022					
<b>Approved by:</b>					

## COURSE DESCRIPTION

<b>Academic year:</b> 2023/2024	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Social and Economic Sciences	
<b>Course ID:</b> FSEV.ÚE/1-AE-980/22	<b>Course title:</b> History of Economic Thought
<b>Educational activities:</b> <b>Type of activities:</b> lecture / seminar <b>Number of hours:</b> <b>per week: 2 / 2 per level/semester: 28 / 28</b> <b>Form of the course:</b> combined	
<b>Number of credits:</b> 6	
<b>Recommended semester:</b> 3., 5.	
<b>Educational level:</b> I.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> a) midterm evaluation: seminar and oral part - maximum 25 points; b) Final evaluation: written part - maximum 75 points. c) Total 100 points.	
<b>Learning outcomes:</b> 1- gains an overview of the basic developments in the history of economic thought or its key ideas, from the beginning of human civilization to contemporary trends in economic thought. 2- is able to understand, analyze, interpret, and evaluate the arguments of the aforementioned ideas or schools of economic thought in the context of current issues and challenges of socioeconomic reality. 3- is able to understand and actively participate in the context of debates on economic issues. 4- is proficient in the use of national and international databases of high-level academic publications and is able to use them in the preparation of an independent work on a chosen topic.	
<b>Class syllabus:</b> The main aim of the subject is to gain a deeper understanding of the ideas and schools of economic thought in the historical context of human experience and social impact. The subject mainly includes knowledge of antiquity, scholasticism, mercantilism, physiocracy/cameralism, classical economics, the historical school, socialist concepts, utopian socialism, marginal utility economics, neoclassical economics, institutionalism and neo-institutionalism, the Austrian School, freiburg School neoliberalism, social market economics, Keynesian economics, post-Keynesianism, neo-Keynesianism, neoconservative economics, monetarism, rational expectations theory, public choice theory, and other currents (problems and challenges) of contemporary economic thought	
<b>Recommended literature:</b> HOLMAN, R. 2017. Dějiny ekonomického myšlení. 4. vydání. Praha. C.H.Beck. 541 s. ISBN 80-7179-631-X. HOREHÁJ, J. – ŠUPLATA, M. Stručné dejiny ekonomických teórii; UMB, Belianum, 2016; ISBN 978-80-557-1037-2. HOREHÁJ, J. – ŠUPLATA, M. Concise History of Economic Theories; UMB, Belianum, 2015; ISBN 978-80-557-1045-7.	

VALACH, E. 2003. Dejiny ekonomických teórií. Banská Bystrica: EF UMB, 2003, 250 s. ISBN 80-8085-821-3.  
 LISÝ, J. a kol. 1996. Dejiny ekonomických teórií. Bratislava: Elita, 2003, 310 s. ISBN 80-8044-005-0.  
 SOJKA, M. 2010. Dějiny ekonomických teorii. Praha: HBT, 2010, 541 s. ISBN 978-80-87109-21-2..  
 LOUŽEK, M. Metodologie ekonomie. 2009. Karolinum, Univerzita Karlova, Praha. 604 s. ISBN 978-80-246-1309-3.

**Languages necessary to complete the course:**

**Notes:**

**Past grade distribution**

Total number of evaluated students: 54

A	B	C	D	E	FX
29,63	24,07	22,22	7,41	9,26	7,41

**Lecturers:** doc. PhDr. Marian Šuplata, PhD.

**Last change:** 09.10.2023

**Approved by:**

## COURSE DESCRIPTION

<b>Academic year:</b> 2023/2024	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Social and Economic Sciences	
<b>Course ID:</b> FSEV.ÚE/1-AE-220/14	<b>Course title:</b> International Economics
<b>Educational activities:</b> <b>Type of activities:</b> lecture / seminar <b>Number of hours:</b> <b>per week: 2 / 2 per level/semester: 28 / 28</b> <b>Form of the course:</b> combined	
<b>Number of credits:</b> 6	
<b>Recommended semester:</b> 4., 6.	
<b>Educational level:</b> I.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> midterm exam for 20 points semestral project for 30 points final exam for 50 points hodnotenie A B C D E Fx body 91-100 81-90 73-80 66-72 60-65 <59	
<b>Learning outcomes:</b> The student will learn terminology related to international trade and international finance. It gains the skills needed to construct and work with different types of international trade patterns. Understand the balance of payments principles, exchange rates and interest rates and their relationships.	
<b>Class syllabus:</b> 1. Labor productivity and comparative advantage: The Ricardian model. 2. Specific factors model and income distribution. 3. Resources, comparative advantage, and income distribution: Heckscher-Ohlin model. 4. The standard trade model. 5. Economies of scale, imperfect competition, and international trade. 6. The Instruments of trade policy. 7. The political economy of trade policy. 8. National system accounting and the balance of payments. 9. Exchange rates and the foreign Exchange approach. 10. Money, interest rates and Exchange rates. 11. Price levels and the Exchange rates in the long run.	
<b>Recommended literature:</b> Krugman, R. Paul and Obstfeld, Maurice: International Economics. Theory and Policy. Addison Wesley, any edition S. Husted, M. Melvin: International Economics. Pearson Education, any edition	
<b>Languages necessary to complete the course:</b>	
<b>Notes:</b>	

<b>Past grade distribution</b>					
Total number of evaluated students: 280					
A	B	C	D	E	FX
12,86	17,86	20,36	19,29	21,79	7,86
<b>Lecturers:</b> Ing. Veronika Mit'ková, PhD.					
<b>Last change:</b> 11.03.2022					
<b>Approved by:</b>					

## COURSE DESCRIPTION

<b>Academic year:</b> 2023/2024					
<b>University:</b> Comenius University Bratislava					
<b>Faculty:</b> Faculty of Social and Economic Sciences					
<b>Course ID:</b> FSEV.ÚE/1-AE-020/22		<b>Course title:</b> Introduction to Economics			
<b>Educational activities:</b> <b>Type of activities:</b> lecture / seminar <b>Number of hours:</b> <b>per week:</b> 2 / 2 <b>per level/semester:</b> 28 / 28 <b>Form of the course:</b> combined					
<b>Number of credits:</b> 6					
<b>Recommended semester:</b> 1.					
<b>Educational level:</b> I.					
<b>Prerequisites:</b>					
<b>Course requirements:</b> two midterm tests during the semester for 20 points each a final test for 60 points Rating: A: 91-100 points; B: 81-90 points; C: 73-80 points; D: 66-72 points; E: 60-65 points; Fx: 0-59 points					
<b>Learning outcomes:</b> Student acquires a basic overview of knowledge in the field of macroeconomics and microeconomics, masters the conceptual apparatus of economic theory. S/he is able to think analytically and use the acquired knowledge to solve model problems and situations.					
<b>Class syllabus:</b> 1. Modern economics, 2. Economic thinking, 3. Demand, supply and prices, 4. Utilization of demand and supply, 5. Consumer decision making, 6. Firm costs, 7. Firm in a competitive environment, 8. Labor market, 9. Capital market, 10. Efficiency of competitive markets, 11. Measuring output and unemployment, 12. Cost of living and inflation, 13. Full employment model					
<b>Recommended literature:</b> Krugman, P. and Wells, R. Economics (2021), Worth Publishers Stiglitz, J.E. and Walsh C. E. (2006) Economics, W.W. Norton P.A. Samuelson, W.D. Nordhaus (2004) Ekonómia, Bradlo, Bratislava or any edition Slovak or English					
<b>Languages necessary to complete the course:</b> Slovak and English language					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 288					
A	B	C	D	E	FX
10,76	10,76	12,5	14,93	9,03	42,01

<b>Lecturers:</b> Ing. Veronika Miřková, PhD., Ing. Jakub Szabó, PhD.
<b>Last change:</b> 05.04.2022
<b>Approved by:</b>

## COURSE DESCRIPTION

<b>Academic year:</b> 2023/2024	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Social and Economic Sciences	
<b>Course ID:</b> FSEV.ÚEŠMV/1-UES-940/23	<b>Course title:</b> Introduction to Political Science
<b>Educational activities:</b> <b>Type of activities:</b> lecture + seminar <b>Number of hours:</b> <b>per week: 4 per level/semester: 56</b> <b>Form of the course:</b> combined	
<b>Number of credits:</b> 6	
<b>Recommended semester:</b> 1.	
<b>Educational level:</b> I.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> Conditions for passing the course: The course consists of ongoing assessments: <ul style="list-style-type: none"> <li>• work with literature:               <ul style="list-style-type: none"> <li>- processing of compulsory literature stated in the syllabus of the course (25 points)</li> </ul> </li> <li>• activity at seminars - answers to questions, discussion on the topic of the given compulsory reading and elaboration of a seminar assignment (max. 36 points)</li> <li>• final test takes place during the examination period, it is a part of the continuous evaluation (39 points).</li> </ul> Participation in individual parts of the course is mandatory in accordance with Study Code. Rating: A: 91-100 points; B: 81-90 points; C: 73-80 points; D: 66-72 points; E: 60-65 points; Fx: 0-59 points	
<b>Learning outcomes:</b> Students will acquire the knowledge necessary to study in the field of political science. They will gain knowledge of basic concepts and aspects in the study of political science and will gain theoretical and practical knowledge in the field of political theory, political system and the relationship of various components. Within the outputs of the course, students acquire the skill of writing, argumentation and critical perception via assessments during class.	
<b>Class syllabus:</b> <ol style="list-style-type: none"> <li>1. Political science as a social science</li> <li>2. Basic political ideologies</li> <li>3. Political systems and governments</li> <li>4. State and power</li> <li>5. Elections and electoral systems</li> <li>6. Political parties and movements</li> <li>7. Nation and nationalism</li> <li>8. Interest groups</li> <li>9. Civil society</li> <li>10. Economy versus politics</li> </ol>	

## 11. International relations

### **Recommended literature:**

- Aron, R. (1993). Demokracie a totalitarismus. Vyd. 2. Brno: Atlantis. 218 s. ISBN: 8071080640.
- Bibó, I. (1996). Bieda východoeurópskych malých štátov. Bratislava:Kalligram
- Berg-Schlosser, D. - Stammen, T. (2000). Úvod do politickej vedy. Praha: Institut pro stredoevropskou kulturu a politiku.
- Cabada, L.; Kubát, M. a kol. (2007). Úvod do studia politickej vedy. Vyd. 2. Plzeň: Nakladatelství a vydavatelství Aleš Čeněk. 455 s. ISBN 978-80-7380-076-5.
- Dahl, R. (2001). O demokracii: průvodce pro občany. Vyd. 1. Praha: Portál. 191 s. ISBN: 80-7178-422-2
- Dahl, R. (1995). Demokracie a její kritici. Praha: Victoria Publishing
- Dočekalová, P., Švec, K. a kol. (2010). Úvod do Politologie. Praha: Grada Publishing.
- Eccleshall, Robert - Finlayson, Alan - Geoghegan, Vincent et al. (2003). Political ideologies: An Introduction. London a New York: Routledge.
- Fiala, P. - Strmiska, M. (1998). Teorie politických stran. Brno: Barrister & Principal.
- Hloušek, V. - Kopeček, L., eds. (2003). Demokracie. Teorie, modely, osobnosti, podmínky, nepřátelé a perspektiv demokracie, Brno: Masarykova univerzita, Mezinárodní politologický ústav
- Lukáč, Pavol (2004). Dejiny a zahraničná politika v Strednej Európe. Bratislava: Kalligram.
- Novák, Miroslav (1997). Systémy politických stran. Úvod do jejich srovnávacího studia Vyd. 1. Praha: SLON. 275 s. ISBN: 80-85850-22-2.
- Parsons,C.(2020). Introduction to Political Science: How to Think for Yourself about Politics. Pearson, 2nd edition
- Říchová, Blanka (2017). Úvod do současné politologie. Srovnávací analýza politických systémů. Praha: Portál.
- Sartori, Giovanni (1993). Teória demokracie. Vyd. 1. Bratislava: Archa. 512 s. ISBN: 80-7115-049-5.

### **Languages necessary to complete the course:**

Slovak and English

### **Notes:**

### **Past grade distribution**

Total number of evaluated students: 138

A	B	C	D	E	FX
1,45	24,64	20,29	19,57	13,04	21,01

**Lecturers:** Mgr. Andrea Figulová, PhD., Mgr. Ivana Gondášová

**Last change:** 09.05.2023

**Approved by:**

## COURSE DESCRIPTION

<b>Academic year:</b> 2023/2024	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Social and Economic Sciences	
<b>Course ID:</b> FSEV.ÚE/1-UE-970/22	<b>Course title:</b> Introduction to Quantitative Analysis
<b>Educational activities:</b> <b>Type of activities:</b> lecture + seminar / lecture <b>Number of hours:</b> <b>per week:</b> 3 / 3 <b>per level/semester:</b> 42 / 42 <b>Form of the course:</b> combined	
<b>Number of credits:</b> 9	
<b>Recommended semester:</b> 2.	
<b>Educational level:</b> I.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> Midterm and finale exam in written form for 100 points	
<b>Learning outcomes:</b> After successfully completing the course student will be able to formulate and solve economic decision-making problems using standard mathematical tools. Since economics is a quantitative discipline as well and mathematics plays a key role, successful completion of this course will enable the study of other economic disciplines (e.g. microeconomics, macroeconomics, operational research, economic growth, analysis of investment projects). The student will use software such as MS Excel and MATLAB.	
<b>Class syllabus:</b> 1. Variables, sets and functions and their economic interpretations. 2. Matrices and their application in economic modeling. 3. Logarithmic and exponential functions in economic modeling. 4. Rate of change, derivatives and their application in economic modeling. 5. Optimization: unconstraint and constraint extreme. 6. Introduction to financial mathematics. 7. Static equilibrium models, dynamic models and non-linear models. 8. Basic integrals and their application in economic modeling. 9. Application of mathematical methods in MSEXcel and MATLAB.	
<b>Recommended literature:</b> Simon, C.P. – Blume, L. (1994): Mathematics for Economists, Norton. Vali, Shapoor.: Principles of Mathematical Economics. Springer 2014. Sauer (2014): Numerical Analysis. Attaway (2018): MATLAB: A Practical Introduction to Programming and Problem Solving.	
<b>Languages necessary to complete the course:</b>	
<b>Notes:</b>	

<b>Past grade distribution</b>					
Total number of evaluated students: 87					
A	B	C	D	E	FX
13,79	11,49	11,49	8,05	25,29	29,89
<b>Lecturers:</b> doc. Ing. Tomáš Domonkos, PhD., Elham Kamal, PhD.					
<b>Last change:</b> 09.10.2023					
<b>Approved by:</b>					

## COURSE DESCRIPTION

<b>Academic year:</b> 2023/2024					
<b>University:</b> Comenius University Bratislava					
<b>Faculty:</b> Faculty of Social and Economic Sciences					
<b>Course ID:</b> FSEV.ÚE/1-AE-110/14		<b>Course title:</b> Macroeconomics			
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week:</b> 4 / 2 <b>per level/semester:</b> 56 / 28 <b>Form of the course:</b> combined					
<b>Number of credits:</b> 9					
<b>Recommended semester:</b> 4.					
<b>Educational level:</b> I.					
<b>Prerequisites:</b> FSEV.ÚE/1-AE-010/14 - Mathematics 1 and FSEV.ÚE/1-AE-030/14 - Mathematics 2					
<b>Course requirements:</b>					
<b>Learning outcomes:</b> To teach students basics of modern macroeconomics, to model and analyze behavior of national economy and to solve corresponding decision problems with adequate methods and tools					
<b>Class syllabus:</b> 1. Macroeconomics theory development. 2. Basic concepts and methods of macroeconomics. 3. Growth models. 4. Business cycles. 5. Traditional keynesian theories of economic fluctuations. 6. Modern theories of short term fluctuations. 7. Inflation. 8. Unemployment. 9. Dynamic theory of macroeconomy policy. Computable model of general macroeconomy equilibrium.					
<b>Recommended literature:</b> Felderer, B. – Homburg, S.: Makroekonomika a nová makroekonomika. Elita, Bratislava 1995 Mlynarovič, V – V. Miťková.: Makroekonomická analýza, IURA Edition, Bratislava, 2010 Pentecost, E., J.: Macroeconomics, MacMillan Press, Ltd., London, 2000					
<b>Languages necessary to complete the course:</b>					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 278					
A	B	C	D	E	FX
6,47	12,95	28,42	14,03	26,98	11,15
<b>Lecturers:</b> doc. Ing. Tomáš Domonkos, PhD., Raman Herasimau, Ing. Matej Jando					
<b>Last change:</b> 11.03.2022					
<b>Approved by:</b>					

## COURSE DESCRIPTION

<b>Academic year:</b> 2023/2024					
<b>University:</b> Comenius University Bratislava					
<b>Faculty:</b> Faculty of Social and Economic Sciences					
<b>Course ID:</b> FSEV.ÚE/1-AE-010/14		<b>Course title:</b> Mathematics 1			
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week:</b> 2 / 2 <b>per level/semester:</b> 28 / 28 <b>Form of the course:</b> combined					
<b>Number of credits:</b> 6					
<b>Recommended semester:</b> 1.					
<b>Educational level:</b> I.					
<b>Prerequisites:</b>					
<b>Course requirements:</b> two written tests during the semester by 30 points final test for 40 points					
<b>Learning outcomes:</b> Student acquires basic knowledge and computational habits for real functions of one real variable, he / she controls the basic conceptual apparatus for limits, differential and integral number as well as numerical advice and functions. Editing, deduction, and analysis of functional relationships provide prerequisites for mastering mathematical modeling of economic phenomena and processes in the next study.					
<b>Class syllabus:</b> 1. Basics of logical construction of mathematics, 2. Sequences, 3. Function of real variable, 4. Limit and continuity of function, 5. Differential number of functions of one variable, 6. Higher order derivations, 7. Integral number of functions of one variable, 8. Certain integral , 9. Infinite numerical and functional advice					
<b>Recommended literature:</b> Fecenko, - J. Pinda, L.: Matematika 1, IURA EDITION, Bratislava, 2006. Horáková, G. – Starečková, A.: Zbierka úloh z matematiky 1, Vydavateľstvo EKONÓM, Bratislava, 2006					
<b>Languages necessary to complete the course:</b>					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 841					
A	B	C	D	E	FX
7,97	10,7	15,34	17,6	27,47	20,93
<b>Lecturers:</b> doc. RNDr. Eduard Hozlár, CSc.					

**Last change:** 11.03.2022

**Approved by:**

## COURSE DESCRIPTION

<b>Academic year:</b> 2023/2024					
<b>University:</b> Comenius University Bratislava					
<b>Faculty:</b> Faculty of Social and Economic Sciences					
<b>Course ID:</b> FSEV.ÚE/1-AE-030/14		<b>Course title:</b> Mathematics 2			
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week:</b> 2 / 2 <b>per level/semester:</b> 28 / 28 <b>Form of the course:</b> combined					
<b>Number of credits:</b> 6					
<b>Recommended semester:</b> 2.					
<b>Educational level:</b> I.					
<b>Prerequisites:</b>					
<b>Course requirements:</b> two written tests during the semester by 30 points final test for 40 points					
<b>Learning outcomes:</b> : Student acquires basic knowledge and computational abilities of higher mathematics for real functions of multiple variables, he / she controls the basic conceptual apparatus for differential number and its applications. The student will learn to use the linear algebra and matrix calculus. Solving specific tasks provides prerequisites for mastering mathematical modeling of economic phenomena and processes in the next study.					
<b>Class syllabus:</b> 1. The function of more real variables, 2. Differential number of functions of n real variables, 3. Extreme functions of n real variables, 4. Vectors, 5. Linear space and its base, 6. Matrix, 7. Inverse matrices and determinants, 8. Systems linear equations and equals, 9. Methods of solving the system of linear equations					
<b>Recommended literature:</b> 1. Jozef Fecenko, Katarína Sakálová: Matematika 2, IURA EDITION, 2004 2. Elena Mojžišová, Katarína Sakálová, Zsolt Simonka: Matematika 2, Zbierka úloh, Vydavateľstvo Ekonóm, 2006					
<b>Languages necessary to complete the course:</b>					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 632					
A	B	C	D	E	FX
15,19	15,19	16,93	16,46	27,53	8,7
<b>Lecturers:</b> doc. RNDr. Eduard Hozlár, CSc.					

<b>Last change:</b> 11.03.2022
<b>Approved by:</b>

## COURSE DESCRIPTION

<b>Academic year:</b> 2023/2024	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Social and Economic Sciences	
<b>Course ID:</b> FSEV.ÚE/1-AE-060/14	<b>Course title:</b> Microeconomics
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week:</b> 4 / 2 <b>per level/semester:</b> 56 / 28 <b>Form of the course:</b> combined	
<b>Number of credits:</b> 9	
<b>Recommended semester:</b> 3.	
<b>Educational level:</b> I.	
<b>Prerequisites:</b> (FSEV.ÚE/1-AE-010/14 - Mathematics 1 or FSEV.ÚE/1-AE-030/14 - Mathematics 2)	
<b>Course requirements:</b> During the semester, it is possible to obtain 10 points for participation in lectures and seminar work. Throughout the semester, there will be two midterm written tests, each worth 20 points. The final exam will consist of a written test with a maximum of 50 points. Credits will not be awarded to a student who accumulates less than 25 points during the semester. grade A B C D E Fx points 91-100 81-90 73-80 66-72 60-65 <59	
<b>Learning outcomes:</b> To provide students with basic knowledge and tools to understand the important role of statistics in routine empirical analyzes and research and to teach students to use adequate statistical methods and procedures to analyze empirical and theoretical economic problems	
<b>Class syllabus:</b> Class syllabus: 1. Market and budget constraint 2. Preferences 3. Utility and choice 4. Demand and revealed preferences 5. Slutsky's equation 6. Market demand and equilibrium 7. Technology, Profit maximization 8. Cost minimization and cost curve 9. Supply and Firm Supply 10. Monopoly and monopoly behavior 11. Factor Markets 12. Oligopoly 13. Behavioral economics, asymmetric information	
<b>Recommended literature:</b>	

Varian, Hal R.: Intermediate Microeconomics. New York, W.W. Norton&Company 2014.

**Languages necessary to complete the course:**

Slovak language and English language

**Notes:**

**Past grade distribution**

Total number of evaluated students: 320

A	B	C	D	E	FX
5,94	17,81	16,88	15,63	24,38	19,38

**Lecturers:** Ing. Miroslava Jánošová, PhD., doc. Ing. Tomáš Domonkos, PhD., Ing. Matej Jando

**Last change:** 09.10.2023

**Approved by:**

## COURSE DESCRIPTION

<b>Academic year:</b> 2023/2024	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Social and Economic Sciences	
<b>Course ID:</b> FSEV.ÚE/1-AE-140/14	<b>Course title:</b> Models of Competition and Cooperation
<b>Educational activities:</b> <b>Type of activities:</b> lecture + seminar / lecture <b>Number of hours:</b> <b>per week:</b> 2 / 2 <b>per level/semester:</b> 28 / 28 <b>Form of the course:</b> combined	
<b>Number of credits:</b> 6	
<b>Recommended semester:</b> 4., 6.	
<b>Educational level:</b> I.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> Two mid term tests for to 25 points during the semester and a final exam for of 50 points. Credits will not be given to a student who has earned less than 20 points from two written tests during the semester. The evaluation scale is as follows: A B C D E Fx 91-100 81-90 73-80 66-72 60-65 <59	
<b>Learning outcomes:</b> After successful completion of the course the student will be able to formulate the role of decision-making situations of economic subjects with different possibilities of cooperation as non-cooperation games in strategic or extended form or as coalition games and found equilibrium in these games. To provide a basis for successful studies of other economic disciplines in which strategic business behavior analysis (eg Branch organization, spatial economy, environmental economy) plays a fundamental role.	
<b>Class syllabus:</b> 1. Decision making models (basic terms) 2. Non-cooperative games (two-player final games, non-cooperative games in strategic form with dominant strategies) 3. Nash's equilibrium in a non-cooperative game in strategic form (in pure and mixed strategies, Shapley and Snow's method of matrix games, optimal strategies) 4. Bimatrix games (typical conflicts of bimatrix games) 5. Cooperative game of two players (the core of the game) 6. Infinitely repeated prison dilemma (selected strategy "Grim Trigger") 7. Extended game (Centipede, Russian Roulette, NIM) 8. Cooperative games more palyers (Shapley's Value, Shapley-Shubik Index, Banzhaf's Power Index) 9. Traditional models of imperfect competition and perfect competition (Cournot model) 10. Stackelberg's oligopoly model, Bertrand's oligopoly model, Cartel	

**Recommended literature:**

Chobot , M., Turnovec, F., Ulašín, V. 1996, Teória hier a rozhodovania. Alfa. Bratislava. 1996

Mañas, M.: Teorie her a její aplikace, SNTL, Praha 1991

Dlouhy, M., Fiala, P. Úvod do teorie her. Praha : Oeconomica, 2007. 114 s. ISBN 978-80-245-1273-0.

Osborne, Martin J. – Rubinstein, Ariel: A Course in Game Theory. Cambridge, MA, MIT Press 1995.

**Languages necessary to complete the course:**

Slovak language and English language

**Notes:****Past grade distribution**

Total number of evaluated students: 313

A	B	C	D	E	FX
7,35	12,78	19,17	21,73	25,56	13,42

**Lecturers:** Ing. Miroslava Jánošová, PhD.

**Last change:** 11.03.2022

**Approved by:**

## COURSE DESCRIPTION

<b>Academic year:</b> 2023/2024	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Social and Economic Sciences	
<b>Course ID:</b> FSEV.ÚE/1-AE-080/14	<b>Course title:</b> Operations Research
<b>Educational activities:</b> <b>Type of activities:</b> lecture / practicals <b>Number of hours:</b> <b>per week:</b> 2 / 4 <b>per level/semester:</b> 28 / 56 <b>Form of the course:</b> combined	
<b>Number of credits:</b> 9	
<b>Recommended semester:</b> 3.	
<b>Educational level:</b> I.	
<b>Prerequisites:</b> FSEV.ÚE/1-AE-010/14 - Mathematics 1 or FSEV.ÚE/1-AE-030/14 - Mathematics 2	
<b>Course requirements:</b> Two written tests during the semester by 20 points, the final test for 60 points grade A B C D E Fx points 91-100 81-90 73-80 66-72 60-65 <59	
<b>Learning outcomes:</b> To cover and explain the substantial methodological tools of the OR and their economic applications, to understand the optimization problems for frequent economic and technological situations. To understand and to be able to solve such problems under the Microsoft Office, to understand the concepts and use of the suboptimal and alternative solutions. To understand the input-output models.	
<b>Class syllabus:</b> 1. Operations Research - its methodological foundations and tools. 2. Linear programming problems, formulations and economic interpretations. 3. The simplex method in tabular form. 4. The essence of duality theory with economic and technological applications. 4. Post-optimality analysis and parametric programming. 5. Transportation and assignment problems. 6. The maximum flow problem and critical path method. 7. Introduction to nonlinear programming. 8. Input-output analysis. 9. Multi-criteria optimization and evaluation	
<b>Recommended literature:</b> Laščiak, A. a kol.: Optimálne programovanie. Alfa, Bratislava 1983 Ivaničová, Z., Brezina, I., Pekár, J.: Operačný výskum. IURA Edition, Bratislava, 2002 Mlynarovič, V.: Modely a metódy viackriteriálneho rozhodovania, Bratislava, Ekonóm, 1998	
<b>Languages necessary to complete the course:</b>	
<b>Notes:</b>	

<b>Past grade distribution</b>					
Total number of evaluated students: 296					
A	B	C	D	E	FX
8,78	13,18	17,57	20,27	26,01	14,19
<b>Lecturers:</b> doc. Ing. Vladimír Mlynarovič, CSc., Ing. Miroslava Jánošová, PhD.					
<b>Last change:</b> 09.10.2023					
<b>Approved by:</b>					

## STATE EXAM DESCRIPTION

<b>Academic year:</b> 2023/2024	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Social and Economic Sciences	
<b>Course ID:</b> FSEV.ÚE/1-AE-SS5/22	<b>Course title:</b> Quantitative Methods in Economics
<b>Number of credits:</b> 9	
<b>Educational level:</b> I.	
<p><b>Course requirements:</b> the exam is evaluated by the commission evaluation A B C D E Fx points 91-100 81-90 73-80 66-72 60-65 &lt;59</p>	
<p><b>Class syllabus:</b></p> <ol style="list-style-type: none"> <li>1. Operational research - object of study, tasks of analysis, tasks of synthesis. Modeling of economic problems as tasks of linear programming. Application of optimization principles in microeconomic theory.</li> <li>2. Models of input-output analysis. Applications of Leontief's input-output model. Application of equilibrium principles in macroeconomics.</li> <li>3. Duality theory in linear programming. Economic interpretation of dual problems of linear programming tasks. Application of duality theory in competitive models.</li> <li>4. Linear programming task and its properties, the concept of solving a linear programming task. The simplex method algorithm as a tool for solving linear programming tasks. Graphical and economic interpretation.</li> <li>5. Sensitivity analysis of the optimal solution of a linear programming task and stability in real economic decision-making processes.</li> <li>6. Multicriteria decision-making tasks - goal programming as a trade-off in real economic decision processes.</li> <li>7. Transportation and assignment problems - formulation and solution methods.</li> <li>8. Nonlinear programming tasks: Classification and principles of their solution. Modeling economic problems by linear or nonlinear models. The portfolio selection problem as a nonlinear programming task.</li> <li>9. Econometric model, linear one-equation model, general linear model and their applications in macroeconomic models.</li> <li>10. Sources and characteristics of random disturbances in the model. Standard statistical assumptions of the linear one-equation linear model.</li> <li>11. Estimation of the parameters of the linear model. Statistical properties of estimators. The method of least squares, its properties in the case of a standard model.</li> <li>12. Estimation of the variance of a random perturbation. Interval estimates and hypothesis tests of model parameters. Measurement of quality of fit (coefficients of determination and information criteria).</li> <li>13. Models with dummy variables and their application in econometric models</li> <li>14. Specification of the linear model, specification errors, their detection, their solution and their consequences for the quality of estimation (multicollinearity, omitted variable, redundant variable, functional form of the model).</li> </ol>	

<p>15. Econometric models in which the random disturbances do not conform to standard assumptions (heteroscedasticity and autocorrelation).</p> <p>16. Application of the one-equation model to forecasts (exogenous and endogenous variables), forecast errors. Prediction of the dynamics of the development of the GDP of Slovakia</p>
<p><b>State exam syllabus:</b></p>
<p><b>Recommended literature:</b></p> <p>Laščiak, A. a kol.: Optimálne programovanie. Alfa, Bratislava 1983</p> <p>Ivaničová, Z., Brezina, I., Pekár, J.: Operačný výskum. IURA Edition, Bratislava, 2002</p> <p>Mlynarovič, V.: Modely a metódy viackriteriálneho rozhodovania, Bratislava, Ekonóm, 1998.</p> <p>Laščiak, Adam a kolektív: Dynamické modely. Bratislava, Alfa 1985, kapitola 1.</p> <p>Muckstadt, John A. - Sapra, Amar: Principles of inventory management. When you are down to four, order more. New York, Springer 2010, kapitola 4.</p> <p>Hatrák, M. (2007) Ekonometria. IURA Edition, Bratislava</p> <p>Hill, R.C., Griffithss, W.E. and Judge, G.G. (2001) Undergraduate Econometrics. Wiley</p>
<p><b>Languages necessary to complete the course:</b></p> <p>Slovak language and English language</p>
<p><b>Last change:</b> 09.10.2023</p>
<p><b>Approved by:</b></p>

## COURSE DESCRIPTION

<b>Academic year:</b> 2023/2024	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Social and Economic Sciences	
<b>Course ID:</b> FSEV.ÚE/1-AE-360/19/19	<b>Course title:</b> Risk management
<b>Educational activities:</b> <b>Type of activities:</b> lecture + seminar / practicals <b>Number of hours:</b> <b>per week:</b> 2 / 2 <b>per level/semester:</b> 28 / 28 <b>Form of the course:</b> combined	
<b>Number of credits:</b> 6	
<b>Recommended semester:</b> 2.	
<b>Educational level:</b> I.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> During the semester, students will take 2 written tests, each worth a maximum of 20 points, and an individual assignment worth a maximum of 20 points. The final exam is a written test with a maximum score of 40 points. To receive a grade, students must earn a minimum of 91 points for an A, a minimum of 81 points for a B, a minimum of 73 points for a C, a minimum of 66 points for a D, and a minimum of 60 points for an E. Students who score less than 20 points total on midterm exams during the semester will receive no credits. The weighting of the midterm/final exams is as follows: Midterm score 60%, Final score 40%. The weighting of the midterm/final exam is as follows: Midterm 60%, Final 40%.	
<b>Learning outcomes:</b> After successfully completing the course, the student will be able to approach risk, assess, and manage risk. They will be familiar with basic concepts and issues in the field, as well as risk management principles, strategies, and practices, and be aware of potential future development trends.	
<b>Class syllabus:</b> Conceptualization Risk Analysis Uncertainty in Risk Assessment Risk management principles and strategies Future development in the field of risk management	
<b>Recommended literature:</b> Aven, T. (2011). Quantitative Risk Assessment: The Scientific Platform. Cambridge: Cambridge University Press. Meyer, T. , & Reniers, G. (2013). Engineering risk management . Berlin: De Gruyter Graduate.	
<b>Languages necessary to complete the course:</b>	
<b>Notes:</b>	

<b>Past grade distribution</b>					
Total number of evaluated students: 127					
A	B	C	D	E	FX
29,92	31,5	20,47	7,87	5,51	4,72
<b>Lecturers:</b> Ing. Nora Grisáková, PhD.					
<b>Last change:</b> 09.10.2023					
<b>Approved by:</b>					

## COURSE DESCRIPTION

<b>Academic year:</b> 2023/2024	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Social and Economic Sciences	
<b>Course ID:</b> FSEV.ÚE/1-AE-160/14	<b>Course title:</b> Seminar to Final Thesis I
<b>Educational activities:</b> <b>Type of activities:</b> seminar / practicals <b>Number of hours:</b> <b>per week:</b> 2 / 2 <b>per level/semester:</b> 28 / 28 <b>Form of the course:</b> combined	
<b>Number of credits:</b> 6	
<b>Recommended semester:</b> 5.	
<b>Educational level:</b> I.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> During the semester, each student will have three presentations of their progress in the preparation of their bachelor's thesis. The maximum score for the first two presentations will be 30 points, and the maximum score for the third presentation will be 40 points. grade A B C D E Fx points 91-100 81-90 73-80 66-72 60-65 <59	
<b>Learning outcomes:</b> Upon completing the course, students will be able to compile the results of their own partial economic-mathematical analyses in a comprehensive and systematic written form and prepare a presentation (in PowerPoint).	
<b>Class syllabus:</b> 1. Fundamental formal and content requirements of the bachelor's thesis in the applied economics study program. Recommendations for writing mathematical texts (omitting auxiliary calculations, formatting, writing mathematical equations in Word). 2. First round of presentations of current results. 3. Second round of presentations of current results. 4. Third round of presentations of current results.	
<b>Recommended literature:</b> Internal regulation no. 12/2013: Directive of the rector of Comenius University in Bratislava on the basic requirements of final theses, rigorous theses and habilitation theses, their originality control, preservation and access at Comenius University in Bratislava. STN ISO 690:2010(E) Information and documentation Guidelines for bibliographic references and citations to information resources	
<b>Languages necessary to complete the course:</b> Slovak language and English language	
<b>Notes:</b>	

<b>Past grade distribution</b>					
Total number of evaluated students: 258					
A	B	C	D	E	FX
32,17	24,03	17,83	10,08	13,57	2,33
<b>Lecturers:</b> doc. Ing. Vladimír Mlynarovič, CSc., Ing. Veronika Miřková, PhD., doc. RNDr. Eduard Hozlár, CSc., doc. Ing. Tomáš Domonkos, PhD., Ing. Miroslava Jánořová, PhD.					
<b>Last change:</b> 09.10.2023					
<b>Approved by:</b>					

## COURSE DESCRIPTION

<b>Academic year:</b> 2023/2024	
<b>University:</b> Comenius University Bratislava	
<b>Faculty:</b> Faculty of Social and Economic Sciences	
<b>Course ID:</b> FSEV.ÚE/1-AE-230/14	<b>Course title:</b> Seminar to Final Thesis II
<b>Educational activities:</b> <b>Type of activities:</b> seminar / practicals <b>Number of hours:</b> <b>per week:</b> 2 / 2 <b>per level/semester:</b> 28 / 28 <b>Form of the course:</b> combined	
<b>Number of credits:</b> 6	
<b>Recommended semester:</b> 6.	
<b>Educational level:</b> I.	
<b>Prerequisites:</b>	
<b>Course requirements:</b> During the semester, each student will have three presentations of their progress in the preparation of their bachelor's thesis. The maximum score for the first two presentations will be 30 points, and the maximum score for the third presentation will be 40 points. grade A B C D E Fx points 91-100 81-90 73-80 66-72 60-65 <59	
<b>Learning outcomes:</b> Upon completing the course, students will be able to compile the results of their own partial economic-mathematical analyses in a comprehensive and systematic written form and prepare a presentation (in PowerPoint).	
<b>Class syllabus:</b> 1. Fundamental formal and content requirements of the bachelor's thesis in the applied economics study program. Recommendations for writing mathematical texts (omitting auxiliary calculations, formatting, writing mathematical equations in Word). 2. First round of presentations of current results. 3. Second round of presentations of current results. 4. Third round of presentations of current results.	
<b>Recommended literature:</b> Internal regulation no. 12/2013: Directive of the rector of Comenius University in Bratislava on the basic requirements of final theses, rigorous theses and habilitation theses, their originality control, preservation and access at Comenius University in Bratislava. STN ISO 690:2010(E) Information and documentation Guidelines for bibliographic references and citations to information resources	
<b>Languages necessary to complete the course:</b> Slovak language and English language	
<b>Notes:</b>	

**Past grade distribution**

Total number of evaluated students: 256

A	B	C	D	E	FX
32,81	23,44	17,97	10,55	11,33	3,91

**Lecturers:** doc. Ing. Tomáš Domonkos, PhD., doc. RNDr. Eduard Hozlár, CSc., Ing. Veronika Miřková, PhD., doc. Ing. Vladimír Mlynarovič, CSc., Ing. Miroslava Jánořová, PhD.

**Last change:** 09.10.2023

**Approved by:**

## COURSE DESCRIPTION

<b>Academic year:</b> 2023/2024					
<b>University:</b> Comenius University Bratislava					
<b>Faculty:</b> Faculty of Social and Economic Sciences					
<b>Course ID:</b> FSEV.ÚE/1-UE-900/22		<b>Course title:</b> Statistics			
<b>Educational activities:</b> <b>Type of activities:</b> lecture / seminar <b>Number of hours:</b> <b>per week:</b> 3 / 3 <b>per level/semester:</b> 42 / 42 <b>Form of the course:</b> combined					
<b>Number of credits:</b> 9					
<b>Recommended semester:</b> 2.					
<b>Educational level:</b> I.					
<b>Prerequisites:</b> FSEV.ÚE/1-AE-010/14 - Mathematics 1 or FSEV.ÚE/1-AE-030/14 - Mathematics 2					
<b>Course requirements:</b> two written tests during the semester by 30 points, the final test for 60 points					
<b>Learning outcomes:</b> To provide students with basic knowledge and tools to understand the important role of statistics in routine empirical analyzes and research and to teach students to use adequate statistical methods and procedures to analyze empirical and theoretical economic problems					
<b>Class syllabus:</b> 1. Introduction to descriptive statistics, deterministic and random variables, position and dispersion rates, methods of graphical presentation of statistical data and relations between them, correlation, correlation, moments. 2. Probability, basic concepts, and definitions, random phenomena, dependence of phenomena, conditional probability, random variables, distribution of truth-likeness. 3. Fundamentals of selection theory, estimation of the theoretical moments of distribution of right-sinking. 4. Hypothesis testing, confidence intervals. 5. Linear regression model, parameter estimation, least squares method, model verification, hypothesis testing. 6. Deceased model application, prediction, prediction error, and its statistical measurement.					
<b>Recommended literature:</b> Viera Pacáková a kolektív: Štatistika pre ekonómov, Bratislava, 2003 Viera Pacáková a kolektív: Štatistika pre ekonómov-Zbierka príkladov A, Bratislava, 2005 Aczel Amir D., Sounderpandian J.: Complete Business Statistics, McGraw-Hill, New York 2002					
<b>Languages necessary to complete the course:</b>					
<b>Notes:</b>					
<b>Past grade distribution</b> Total number of evaluated students: 72					
A	B	C	D	E	FX
26,39	18,06	15,28	11,11	15,28	13,89

**Lecturers:** doc. Ing. Tomáš Domonkos, PhD., doc. RNDr. Eduard Hozlár, CSc., Elham Kamal, PhD.

**Last change:** 14.03.2022

**Approved by:**