Faculty: Faculty of Business Economics with seat in Košice

**Course code:** KFRP **Title of course:** Business Process Improvement PHF/PPF22912/22

Type, load and method of teaching activities:

Form of course: Lecture

Recommended load of course ( number of lessons ):

Per week: Per course: 16s

Method of study: present

Number of credits: 10

Recommended semester/trimester of study: 1.

Degree of study: III.

**Prerequisites:** 

#### **Requirements to complete the course:**

30% - active participation in colloquia, presentation of a selected topic

30% - research study

40% - final exam

#### Student workload:

Student's workload (in hours): 260 hours (10 ECTS x 26 hours)

Participation in colloquia: 16 hours

Preparation for colloquia: 44 hours

Elaboration of a research study: 100 hours

Preparation for the final exam: 100 hours

## **Teaching results:**

The main educational goal of the course is to focus on improving processes based on exactly determined criteria, in the most general sense and reducing the variability of their parameters, in the conditions of the fourth industrial revolution, combining methods of statistical quality improvement and design of experiment procedures.

Students will acquire the following knowledge:

• in the field of identification of basic parameters of processes and their improvement;

• about the most important techniques and methods used in statistical process control and planning of experiments;

• in the field of different approaches to planning of experiments, process capabilities and their improvement.

Students will acquire the following competencies in case of successful completion of the course:

• ability to choose an appropriate method, tool, or a technique applicable to solving a specific problem;

• verify all the necessary conditions for using the specific method and select the most suitable one on the basis of the improvement criteria;

• ability to interpret and verify mentioned methods in practice.

Students will acquire the following skills in case of successful completion of the course:

• the ability to implement individual methods of business process improvement in practice;

• computational literacy at the user level in the field of SPC and DOE;

• to present achieved results accurately, concisely and in an understandable form.

#### Indicative content:

- Process of improvement, cycles of improvement
- Process regulation, Statistical process control
- Process capability
- Introduction to Design of Experiments (DOE)
- Full and fractional factorial designs
- Screening designs
- Experimental Design and Optimization
- Response surface designs

# Support literature:

1. OAKLAND, John – OAKLAND, Robert. Statistical Process Control, 7th Edition. London: Routledge Taylor and Francis Group. 2019. 446 s. ISBN 978#1#138#06426#3.

2. DOTY, A. Leonard.Statistical Process Control, 2nd Edition. New York: Industrial Press Inc. 200 Madison Avenue. 1996. 400 s. ISBN – 10:0831130695.

3. BERGER, W. Roger – HART, H. Thomas. Statistical Process Control: A Guide for

Implementation (Quality and Reliability Book 8) 1st Edition, Kindle Edition. 2020. ASQC – The American Society for Quality Control. Edward G. Schilling, Center for Quality and Applied Statistics, Rochester Institute of Technology, Rochester, New York. First Published 1986.80 s. ISBN 0-8247-7625-9.

4. MONTGOMERY, C. Douglas. Design and Analysis of Experiments (8thEdition). John Wiley & Sons, Inc. 111 River Street, Hoboken, New Jersey, United States. 2017. 725 s. ISBN978-1-118-14692-7.

5. ANTONY, Jiju. Design of Experiments for Engineers and Scientists, 2nd Edition. London: Elsevier Health Sciences, 2014. 221 s. ISBN 978-0-08-099417-8.

6. KRISHNAIAH, Kamatam – SHAHABUDEEN, Peer Mohamed. Applied Design of Experiments and Taguchi Methods. Kindle Edition. New Delhi: Asoke K. Ghosh, PHI Learning Private Limited, 2012. Eastern Economy Edition. 362 s. ISBN 978-81-203-4527-0.

7. ANDERSEN, Bjørn. Business Process Improvement Toolbox, 2nd Edition. Milwaukee, Wisconsin: American Society for Quality, Quality Press, 2007. 296 s. ISBN 978-0-87389-719-8.

## Syllabus:

• PDCA cycle, DMAIC process, DMADV methodology, IDOV methodology. Criteria and models for process improvement.

• Statistical process control charts. Shewhart charts, CUSUM, EMWMA, a Hotelling control charts, Performance of control charts.

- Process capability index, Taguchi capability Index.
- Stages of DOE:
- o Planning;
- o Screening;
- o Optimization;
- o Robustness Testing;
- o Verification
- Full and fractional factorial designs at 2-levels and 3-levels
- Screening of designed procedures, Plackett Burman designs.
- Optimization of designs using mathematical models and computation.
- Box Behnken design, Central composite design, Gradient enhanced kriging.
- Recommended software: R Studio, IBM SPSS Modeler.

## Language whose command is required to complete the course:

Slovak language / English language

Notes:

N/A									
Assessment of courses Total number of evaluated students: 12									
A B C D E FX									
0.0	0.0	0.0	8.33	50.0	41.67				
Lecturer: doc.	Ing. Michal Tkáč	, PhD., MBA, D	r. h. c. prof. RNE	Dr. Michal Tkáč,	CSc.				
Date of the late	est change: 15.08	3.2022							
Approved by: Person responsible for the delivery, development and quality of the study programme doc. Ing. Emília Dul'ová Spišáková, PhD., Person responsible for the delivery, development and quality of the study programme doc. Ing. Silvia Megyesiová, PhD., Person responsible for the delivery, development and quality of the study programme prof. Ing. Bohuslava									

Mihalčová, PhD. & PhD., EUR ING., Person responsible for the delivery, development and quality of the study programme Dr. h. c. prof. RNDr. Michal Tkáč, CSc., Person responsible for the delivery, development and quality of the study programme doc. Ing. Roland Weiss, PhD.

University: University	ty of Economics in Bratislava
Faculty: Faculty of E	Business Economics with seat in Košice
<b>Course code:</b> KEM PHF/ PPEM22903/22	Title of course: Competitiveness and Performance Management
Form of course: Le	d of course ( number of lessons ): rse: 16s
Number of credits:	
Recommended seme	ester/trimester of study: 2.
Degree of study: III.	
Prerequisites:	
Requirements to comproject, exam • elaboration and pre • consultation activit • final oral exam - 60	esentation of the project - 15% y - 25%
<ul><li> preparation for acti</li><li> project elaboration</li></ul>	sultations - 16 hours ve forms of learning - 56 hours - 80 hours oral exam - 108 hours
competitiveness and Students will develop today's competitive e they are able to select Knowledge: • on paradigms in ma • on the principles of • on management me Competence:	f operation of organizations, ethods and techniques leading to growth in performance and competitiveness te data related to the management of companies at home and abroad nalysis,

• apply managerial methods in the management of the organization.

#### Indicative content:

- Megatrends of business operation 2030
- Management paradigms
- Theories of competitiveness management
- Quantitative evaluation of the company's competitiveness
- New approaches to evaluating business performance
- Current processes of managerial decision-making

• Crisis management of the company in terms of vulnerability, complexity and improbability of development.

#### Support literature:

1. ROBBINS S. ,P. et.al. 2019. Fundamentals of Management. Global Edition. Pearson Education Limited. ISBN: 1292307323. 552 pg.

2. CARPENTER, M. et.al: Management Principles. https://2012books.lardbucket.org/pdfs/management-principles-v1.0.pdf

3. CHURSIN, A., MAKAROV, Y., 2015. Management of Competitiveness. Springer International Publishing Switzerland 2015. ISBN 978-3-319-16243-0 ISBN 978-3-319-16244-7 (eBook). DOI 10.1007/978-3-319-16244-7

4. Watkins, M. 2013. The First 90 Days: Critical Success Strategies. Harvard Business Review Press, 2013

5. GRONHAUG, K., & STONE, R. 2012. The learning organization: An historical perspective, the learning process, and its infuence on competitiveness. Competitiveness Review, 22(3), 261-275

6. SALEM, M., A, SHAWTARI, F., A., SHAMSUDIN, M., F., HUSSAIN, H., I. 2016. The relation between stakeholders' integration and environmental competitiveness. Social Responsibility Journal Volume 12 Issue 4. ISSN: 1747-1117

7. NARKUNIEN?, J, ULBINAIT, A. 2018. Comparative analysis of company performance evaluation methods. The International Journal ENTREPRENEURSHIP AND SUSTAINABILITY ISSUES. ISSN 2345-0282 (online) http://jssidoi.org/jesi/

## Syllabus:

• Business and managerial reasons for changes in the functioning of companies

- New requirements for companies in relation to paradigms
- Competition, competitive advantage, competitiveness of the company, factors of competitiveness, evaluation of competitiveness
- Company performance, performance factors, ways to increase performance

• Process and theories of decision-making, creative decision-making techniques, brain and

decision-making: use of knowledge of neuroeconomics and neuroscience in management

• Crisis in business, analysis of crisis development, strategies for identifying the root cause, determining the procedure of crisis management, managing and ending the crisis.

## Language whose command is required to complete the course:

English language / Slovak language

# Notes:

# N/A

## Assessment of courses

Total number of evaluated students: 5

А	В	С	D	Е	FX
0.0	60.0	20.0	20.0	0.0	0.0

Lecturer: prof. Ing. Bohuslava Mihalčová, PhD. & PhD., EUR ING.

Date of the latest change: 27.08.2022

**Approved by:** Person responsible for the delivery, development and quality of the study programme doc. Ing. Emília Dul'ová Spišáková, PhD., Person responsible for the delivery, development and quality of the study programme doc. Ing. Silvia Megyesiová, PhD., Person responsible for the delivery, development and quality of the study programme prof. Ing. Bohuslava Mihalčová, PhD., & PhD., EUR ING., Person responsible for the delivery, development and quality of the study programme Dr. h. c. prof. RNDr. Michal Tkáč, CSc., Person responsible for the delivery, development and quality of the study programme doc. Ing. Roland Weiss, PhD.

University: University of Economics in Bratislava

Faculty: Faculty of Business Economics with seat in Košice

**Course code:** KKM **Title of course:** Data Economy and Big Data PHF/PPK22901/22

Type, load and method of teaching activities:

Form of course: Lecture

Recommended load of course ( number of lessons ):

Per week: Per course: 16s

Method of study: present

Number of credits: 10

Recommended semester/trimester of study: 1.

Degree of study: III.

Prerequisites:

#### **Requirements to complete the course:**

30% - active participation in colloquia, presentation of a selected topic

30% - research study

40% - final exam

#### Student workload:

Participation in colloquia: 16 hours Preparation for colloquia: 44 hours Elaboration of a research study: 100 hours Preparation for the final exam: 100 hours

## **Teaching results:**

The aim of the course is to provide students with knowledge in the field of data economics. The course deals with the analysis and processing of large data sets (Big data). Students should become familiar with the creation, structure and management of data warehouses, understand approaches to data mining as well as advanced knowledge related to neural networks.

Knowledge:

The graduates will gain knowledge related to the creation of data warehouses for Big Data and their management. They will also gain knowledge related to the processing, transformation, modeling, and evaluation of Big data (information, data) to identify the trends and to detect, interpret and share significant patterns in the data. The students will understand non-trivial models and tools of machine learning and neural network.

Competences:

The graduate will master the work with databases and data techniques of the processing and evaluation of big data. The graduate will be able to create and manage a data warehouse as well as use sophisticated techniques of data mining and knowledge discovery for the analysis of this data. Skills:

The graduate will be able to analyze a large amount of data from business processes using statistical, database and data mining tools. They will know the techniques of pattern detection, classification, association, and prediction and be able to select appropriate procedures for the creation and validation of neural networks.

Big Data, Complexity of Big Data, Big Data Processing Architectures, Big Data Technologies, Big Data Business Value, Data Warehouse, Re-Engineering the Data Warehouse, Workload Management in the Data Warehouse, New Technology Approaches. Data mining

Data and file formats (structured, unstructured, etc.), SQL and databases, Text processing (parsing, tokenizing, stemming, etc.), Data representation (feature vector representation, etc.) Need for data mining, Pre-processing: Dimensionality reduction, Missing values, Normalization & standardization, Noise and outlier detection. Pattern's detection, classification, association and prediction techniques.

Machine learning

Basic concepts of Neural Networks, Characteristics of Neural Networks, Terminologies, Applications of the artificial neural networks. Supervised learning, Unsupervised learning, Re-inforcement learning. Knowledge Representation, Artificial Intelligence, Learning rules, Error correction learning, Memory based learning, Hebbian learning, Competitive learning, Boltzmann learning, Single layer perceptron, Multilayer perceptron, Back propagation, Recurrent networks, Network Pruning, Adaptive networks, Decision-based neural networks, Hierarchical neural networks, Probabilistic neural network, Radial basis function networks, Comparison of RBF Networks and Multilayer perceptron. Classification of linearly separable patterns, Boltzmann machine, Helmholtz machine, Support vector machines, Self organization maps, Genetic Algorithms, Prediction Systems.

Recommended software

R Studio, IBM SPSS Modeler.

#### Support literature:

1. TKÁČ, Michal - VERNER, Robert. Artificial neural networks in business: two decades of research. In Applied soft computing. - Amsterdam: Elsevier Science Publishers B.V. ISSN 1872-9681, 2016, vol. 38, pp. 788-804.

2. TKÁČ, Michal - VERNER, Robert - DANISHJOO, Enayat. Modern computation methods for business applications. Reviewers: Adrian Olaru, Jozef Mihok. 1. vyd. Vaterstetten: Adoram, 2013. 276 s. [13,85 AH]. ISBN 978-3-00-044092-2.

3. SHARDA, Ramesh; DELEN, Dursun; TURBAN, Efraim. Analytics, Data Science, & Artificial Intelligence. Pearson, 2020.

4. GOPAL, M. Applied machine learning. McGraw-Hill Education, 2019.

5. KOTU, Vijay; DESHPANDE, Bala. Data science: concepts and practice. Morgan Kaufmann, 2018.

6. SCHMARZO, Bill. The The Economics of Data, Analytics, and Digital Transformation: The theorems, laws, and empowerments to guide your organization's digital transformation. Packt Publishing Ltd, 2020.

7. CARRIERE-SWALLOW, Mr Yan; HAKSAR, Mr Vikram. The economics and implications of data: an integrated perspective. International Monetary Fund, 2019.

8. TADDY, Matt. Business data science: Combining machine learning and economics to optimize, automate, and accelerate business decisions. McGraw Hill Professional, 2019.

9. GHAVAMI, Peter. Big Data Management: Data Governance Principles for Big Data Analytics. Walter de Gruyter GmbH & Co KG, 2020.

10. GHAVAMI, Peter. Big data analytics methods: analytics techniques in data mining, deep learning and natural language processing. Walter de Gruyter GmbH & Co KG, 2019.

11. ZHOU, Hong. Learn Data Mining Through Excel. Apress, 2020.

12. KUMAR, D. G.; KUMAR, G. D. Machine learning techniques for improved business analytics. 2018.

13. FINLAY, Steven. Artificial intelligence and machine learning for business. A No-Nonsense Guide to Data Driven Technologies, 2017,

#### Syllabus:

Big data Big Data, Complexity of Big Data, Big Data Processing Architectures, Big Data Technologies, Big Data Business Value, Data Warehouse, Re-Engineering the Data Warehouse, Workload Management in the Data Warehouse, New Technology Approaches. Data mining Data and file formats (structured, unstructured, etc.), SQL and databases, Text processing (parsing, tokenizing, stemming, etc.), Data representation (feature vector representation, etc.) Need for data mining, Pre-processing: Dimensionality reduction, Missing values, Normalization & standardization, Noise and outlier detection. Pattern's detection, classification, association and prediction techniques. Machine learning Basic concepts of Neural Networks, Characteristics of Neural Networks, Terminologies, Applications of the artificial neural networks. Supervised learning, Unsupervised learning, Re-inforcement learning. Knowledge Representation, Artificial Intelligence, Learning rules, Error correction learning, Memory based learning, Hebbian learning, Competitive learning, Boltzmann learning, Single layer perceptron, Multilayer perceptron, Back propagation, Recurrent networks, Network Pruning, Adaptive networks, Decision-based neural networks, Hierarchical neural networks, Probabilistic neural network, Radial basis function networks, Comparison of RBF Networks and Multilayer perceptron. Classification of linearly separable patterns, Boltzmann machine, Helmholtz machine, Support vector machines, Self organization maps, Genetic Algorithms, Prediction Systems. Recommended software R Studio, IBM SPSS Modeler.

# Language whose command is required to complete the course:

English language / Slovak language

Notes:

# N/A

## Assessment of courses

Total number of evaluated students: 6

А	В	С	D	Е	FX	
0.0	0.0	66.67	33.33	0.0	0.0	

Lecturer: Dr. h. c. prof. RNDr. Michal Tkáč, CSc., doc. Ing. Michal Tkáč, PhD., MBA

## Date of the latest change: 15.08.2022

**Approved by:** Person responsible for the delivery, development and quality of the study programme doc. Ing. Emília Dul'ová Spišáková, PhD., Person responsible for the delivery, development and quality of the study programme doc. Ing. Silvia Megyesiová, PhD., Person responsible for the delivery, development and quality of the study programme prof. Ing. Bohuslava Mihalčová, PhD., & PhD., EUR ING., Person responsible for the delivery, development and quality of the study programme Dr. h. c. prof. RNDr. Michal Tkáč, CSc., Person responsible for the delivery, development and quality of the study programme doc. Ing. Roland Weiss, PhD.

Universi	ty: Univers	sity of Eco	onomics in	n Bratislav	/a				
Faculty:	Faculty: Faculty of Business Economics with seat in Košice								
Course c Dekanát 1 ODizP/22	PHF/	Title of	f course: ]	Defence o	f Dissertat	ion Thesi	S		
Form of Recomm Per wee	id and met f course: nended loa k: Per cou of study:	ad of cou urse:	C		sons ):				
Number	of credits:	: 40							
Recomm	ended sem	nester/tri	mester of	study: 5.,	, 6, 7., 8				
Degree o	f study: II	I.							
Prerequi	sites:								
Requirer	nents to co	omplete t	he course	:					
Student	workload:								
Teaching	results:								
Indicativ	e content:								
Support	literature:	:							
Syllabus	:								
Languag	e whose co	ommand	is require	d to com	plete the c	ourse:			
Notes:									
	e <b>nt of cour</b> nber of eva		udents: 8						
А	В	С	D	Е	FX	NO	NOd	0	Od
0.0	87.5	0.0	12.5	0.0	0.0	0.0	0.0	0.0	0.0
Lecturer	:							·	
Date of t	he latest c	hange: 27	7.08.2022						
programm developm responsib Mihalčov of the stu	d by: Persone doc. Ing nent and qu le for the c á, PhD. & dy progran developme	g. Emília I hality of th lelivery, d PhD., EU nme Dr. h	Dul'ová Sp ne study pr nevelopme R ING., F . c. prof. F	bišáková, l cogramme nt and qua Person resj NDr. Mic	PhD., Perso doc. Ing. ality of the ponsible fo chal Tkáč,	on respon Silvia Me study pro or the deliv CSc., Per	sible for the gyesiová, l ogramme p very, devel son respon	he delivery PhD., Pers rof. Ing. E lopment an asible for t	on Sohuslava nd quality

University:	University	of Economics	s in Bratislav	va			
Faculty: Fa	culty of Bus	siness Econor	nics with sea	at in Košice			
<b>Course cod</b> Dekanát PH DŠS/22		itle of cours	e: Dissertatio	on State Exa	m		
Form of c Recomme Per week:	ourse:			sons ):			
Number of	credits: 20						
Recommen	ded semest	er/trimester	of study: 3.	, 4			
Degree of s	tudy: III.						
Prerequisit	ces:						
Requireme	nts to comp	lete the cour	·se:				
Student wo	orkload:						
Teaching r	esults:						
Indicative	content:						
Support lit	erature:						
Syllabus:							
Language	whose comm	nand is requ	ired to com	plete the cou	irse:		
Notes:							
	<b>t of courses</b> per of evalua	ted students:	6				
А	В	C	D	E	FX	np	р
0.0	16.67	33.33	16.67	16.67	16.67	0.0	0.0
Lecturer:	°	<u>.</u>			· · · · · ·		<u>^</u>
Date of the	latest chan	ge: 27.08.202	22				
programme developmer responsible Mihalčová, of the study	doc. Ing. Er nt and quality for the deliv PhD. & PhI programme	esponsible fo nília Duľová y of the study yery, develop D., EUR ING Dr. h. c. prot nd quality of	Spišáková, 1 programme nent and qua ., Person resj f. RNDr. Mie	PhD., Person doc. Ing. Sil ality of the st ponsible for chal Tkáč, Cá	responsible : lvia Megyesie udy program the delivery, o Sc., Person re	for the delive ová, PhD., P me prof. Ing development esponsible fo	ery, erson g. Bohuslava t and quality or the

University: University of Economics in Bratislav
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Faculty: Faculty of Business Economics with seat in Košice

**Course code:** KFRP **Title of course:** Environmental Economics PHF/PPF22921/22

Type, load and method of teaching activities:

Form of course: Lecture

Recommended load of course ( number of lessons ):

Per week: Per course: 16s

Method of study: present

Number of credits: 10

Recommended semester/trimester of study: 2.

Degree of study: III.

Prerequisites:

#### **Requirements to complete the course:**

30% - active participation in colloquia, presentation of a selected topic

30% - research study

40% - final exam

#### Student workload:

Student's workload (in hours): 260 hours (10 ECTS x 26 hours)

Participation in colloquia: 16 hours

Preparation for colloquia: 44 hours

Elaboration of a research study: 100 hours

Preparation for the final exam: 100 hours

#### **Teaching results:**

Teaching results:

The aim of the course is to provide basic theoretical knowledge of environmental economics, environmental policy of Slovakia and their economic instruments. Knowledge of key legislative and regulatory developments in EU environmental policy. Knowledge of how regulations are adopted, estimating the effectiveness of benefits, costs and economic impact of environmental legislation. Knowledge:

Environmental economics is focused on the education of professionals who are able to solve economic and managerial problems with regard to environmental protection. Graduates are able to analyze the problems and possibilities of economic development, which will not only ensure the optimal use of resources of current generations, but will not endanger the possibilities of using resources for future generations. At the level of theoretical knowledge, graduates will understand the essential facts, concepts, principles and theories of management and environmental economics. Competence:

Ability to critically assess global environmental issues.

Ability to analyze the economic efficiency of selected environmental measures.

Ability to classify weak and strong sustainability.

Ability to choose the appropriate economic instrument for environmental policy. Skills:

Economically justify the need for environmental protection measures in the organization. Select the optimal variants of the proposed solutions.

Apply an environmental cost management system.

To be able to orientate oneself in economic instruments of Slovak and European environmental policy

Presentation of knowledge from the field of environmental economics.

Team work with emphasis on current issues in the field of environmental economics.

# Indicative content:

- Natural resources, material basis society
- Economic reproduction process
- Valuation of natural and environmental resources
- Economic growth and the environment
- Evaluation of the efficiency of environmental projects
- Application of economic instruments
- Social economic causes of qualification environment
- Economic damage due to environmental pollution
- Cost benefit analysis of legislative measures

# Support literature:

1. ZELEŇÁKOVÁ, M., LABANT, S., ZVIJÁKOVÁ, L., WEISS, E., ČEPELOVÁ, H., WEISS, R., MINĎAŠ, J. (2020). Methodology for environmental assessment of proposed activity using risk analysis. Environmental Impact Assessment review, 80, 106333. ISSN 0195-9255.

2. MADDEN, John R.; SHIBUSAWA, Hiroyuki; HIGANO, Yoshiro. Environmental

Economics and Computable General Equilibrium Analysis. Springer Singapore, 2020. ISBN 978-981-15-3970-1.

3. LEWIS, Lynne; TIETENBERG, Tom. Environmental economics and policy. Routledge, 2019. ISBN 9781292026800.

4. KEREKES, Sándor; MARJAINÉ SZERÉNYI, Zsuzsanna; KOCSIS, Tamás. Sustainability, environmental economics, welfare. Corvinus University of Budapest, 2018. ISBN 978-963-503-711-7.

5. LEISEROWITZ, Anthony A., et al. Climate change in the American mind. University of Washington, 2018.

6. AIDY, Joseph E. The political economy of carbon pricing policy design. Harvard Project on Climate Agreements, 2017.

7. BUSHNELL, James; PETERMAN, Carla; WOLFRAM, Catherine. Local solutions to global problems: Climate change policies and regulatory jurisdiction. Review of Environmental Economics and Policy, 2008, 2.2: 175-193.

# Syllabus:

- Renewable natural resources, reproduction
- Non-renewable natural resources, efficient allocation
- Basic methods of valuing market goods and nature services
- Natural resources and circular economy
- Boundaries of growth
- Theory of sustainable development
- Environment as a system, components, interaction
- Forms and tools of environmental policy
- Cost-effectiveness analysis

# Language whose command is required to complete the course:

Slovak language / English language

Notes:

Assessment of courses

А	В	С	D	E	FX			
0.0	0.0	0.0	0.0	0.0	0.0			
Lecturer: doc. Ing. Roland Weiss, PhD.								
Date of the lat	test change: 15.08	3.2022						
<b>Approved by:</b> Person responsible for the delivery, development and quality of the study programme doc. Ing. Emília Dul'ová Spišáková, PhD., Person responsible for the delivery, development and quality of the study programme doc. Ing. Silvia Megyesiová, PhD., Person responsible for the delivery, development and quality of the study programme prof. Ing. Bohuslava Mihalčová, PhD. & PhD., EUR ING., Person responsible for the delivery, development and quality of the study programme Dr. h. c. prof. RNDr. Michal Tkáč, CSc., Person responsible for the delivery, development and quality of the study programme doc. Ing. Roland Weiss, PhD.								

University:	Unive	rsity of	Economics	in	Bratislava
University.	Unive	isity of	Economics		Dialisiava

Faculty: Faculty of Business Economics with seat in Košice

**Course code:** KKM **Title of course:** Lean Six Sigma 4.0

PHF/PPK22922/22

Type, load and method of teaching activities:

Form of course: Lecture

Recommended load of course ( number of lessons ):

Per week: Per course: 16s

Method of study: present

Number of credits: 10

Recommended semester/trimester of study: 2.

Degree of study: III.

**Prerequisites:** 

#### **Requirements to complete the course:**

30% - active participation in colloquia, presentation of a selected topic

30% - research study

40% - final exam

#### Student workload:

Participation in colloquia: 16 hours Preparation for colloquia: 44 hours

Elaboration of a research study: 100 hours

Preparation for the final exam: 100 hours

## **Teaching results:**

The main educational goal of the course is to focus on performance improvement by systematic waste elimination and variation reduction, in the conditions of the Fourth Industrial Revolution, combining lean manufacturing / lean enterprise and Six Sigma method, focusing on eliminating the eight major types of waste (muda): defects, overproduction, downtime, non-use of talent, transport, inventory, movement and extraordinary processing.

Knowledge:

• in the field of systematic waste disposal in production and services in the conditions of Industry 4.0,

• in the field of increasing the efficiency of processes and companies,

• on the most important systems, techniques and tools for quality assurance both in development and in production and services.

Competencies:

• ability to select suitable systems, tools, and techniques that can be used to improve business performance by systematically disposing of waste and reduction of variability,

• to identify and verify the conditions necessary for the use of a suitable system or method and select the most suitable one in terms of specific implementation in the company,

• ability to interpret and verify the results of the implementation of the methods in practice. Skills:

• the ability to implement individual systems, techniques and methods in the conditions of Industry 4.0,

• Computational literacy at the user level in the area of available software products relevant to the systems, techniques and methods taught,

• share and communicate the outputs obtained accurately, concisely and in an understandable form.

#### Indicative content:

- Lean Six Sigma methodology and the time of Industry 4.0
- Design for Six Sigma methodology
- Axiomatics design
- Statistical tolerancing, COPQ
- Taguchi methods
- Lean management
- Creativity Techniques
- Design for X

#### Support literature:

1. TKÁČ, Michal - LYÓCSA, Štefan. On the evaluation of Six Sigma projects. In Quality and Reliability Engineering International. - Oxford : John Wiley and Sons. ISSN 1099-1638, 2010, vol. 26, no. 1, p. 115-124.

2. GEORGE SR, M. L., BLACKWELL, D. K., GEORGE JR, M. L., & RAJAN, D. (2019). Lean Six Sigma in the age of artificial intelligence: Harnessing the power of the fourth industrial revolution. McGraw-Hill Education.

3. PYZDEK, Thomas; KELLER, P. A. The Six Sigma Handbook. 5-th Ed. 2018.

4. BASS, Issa. Six sigma statistics with Excel and Minitab. New York: McGraw-Hill, McGraw-Hill Education, 2018 2-nd Ed. ISBN: 978-0071838757

5. PYZDEK, Thomas – KELLER, Paul. Six Sigma Handbook. United States : Copyright © McGraw-Hill Education, 2014. 675 s. ISBN 978-0-07-184054-5.

6. GASPERSZ, Vincent. Lean Six Sigma. Jakarta : Gramedia Pustaka Utama, 2007. 325 s. ISBN 979-22-2559-5.

7. CREVELING, M. Clyde – SLUTSKY, Jeff – ANTIS, David. Design for Six Sigma in Technology and Product Development, 1st Edition. Pearson Education, 2002. 800 s. ISBN 978-0-13-009223-6

8. YANG, Kai – EL-HAIK, Basem. Design for Six Sigma: A Roadmap for Product Development. Copyright © 2009, 2003 by The McGraw-Hill Companies, Inc., 2009. 768 s. ISBN 978-0-07-154767-3.

9. SUH, Nam Pyo – LEE, Dai Gil. Axiomatic Design and Fabrication of Composite Structures - Applications in Robots, Machine Tools, and Automobiles. Oxford : University Press, 2005. 709 s. ISBN. 978-0195178777.

10. DEHNAD, Khosrow. Quality Control, Robust Design, and the Taguchi Method. Springer Science & Business Media, 2012. 309 s. ISBN 978-1-4684-1474-5.

## Syllabus:

- Six Sigma in practice. Lean Six Sigma.
- New product development. Concept knowlege (C-K) theory.
- The indenpendence Axiom. The information Axiom. Design structure matrix.
- The Economics of Tolerance. Cost of Poor Quality.
- Taguchi Loss Function and Tolerance. Tolerance Based on Taguchi's Loss function.
- Lean management tools, lean purchasing.
- TRIZ classical. TRIZ for Business and management.
- Design to cost. Target costing. Design for assembly. Design for service.
- Recommended software: R Studio, IBM SPSS Modeler

Language whose command is required to complete the course:

Slovak language / English language								
Notes: N/A								
Assessment of courses Total number of evaluated students: 5								
A B C D E FX								
0.0	0.0	0.0	20.0	80.0	0.0			
Lecturer: doc.	Ing. Michal Tkáč	, PhD., MBA, D	r. h. c. prof. RNI	Dr. Michal Tkáč,	CSc.			
Date of the late	est change: 15.08	3.2022						
<b>Date of the latest change:</b> 15.08.2022 <b>Approved by:</b> Person responsible for the delivery, development and quality of the study programme doc. Ing. Emília Dul'ová Spišáková, PhD., Person responsible for the delivery, development and quality of the study programme doc. Ing. Silvia Megyesiová, PhD., Person responsible for the delivery, development and quality of the study programme prof. Ing. Bohuslava Mihalčová, PhD. & PhD., EUR ING., Person responsible for the delivery, development and quality of the study programme Dr. h. c. prof. RNDr. Michal Tkáč, CSc., Person responsible for the								

delivery, development and quality of the study programme doc. Ing. Roland Weiss, PhD.

University: Univers	ity of Economics in Bratislava			
Faculty: Faculty of Business Economics with seat in Košice				
Course code: KEM PHF/ PPEM22911/22	Title of course: Management and Funding of Innovation			
Form of course: L	ad of course ( number of lessons ): urse: 16s			
Number of credits: 10				
Recommended semester/trimester of study: 1.				
Degree of study: III				
Prerequisites:				
<b>Requirements to co</b> 30% - active partici 30% - research stud 40% - final exam	pation in colloquia, presentation of a selected topic			
	•			
and financing of in necessary to work	rse is to provide students an advanced knowledge in the field of management novation with a link to practical examples and case studies in this area. It is with current statistical data and monitor current trends in innovation not only around the world, by analyzing scientific work from the Web of Science and			

Scopus databases. Knowledge:

Students will gain basic knowledge in the field of innovation and its management, as well as the ability to understand the possibilities of financing innovation activities, identify risks and barriers to the introduction of innovations on the market. They will acquire knowledge in the field of evaluation of economic effects of innovations and costs associated with the innovation process. They will also gain knowledge in the field of evaluation of innovation of innovation of innovation performance and methodology of creating innovation index, but also in the field of new trends in innovation.

Competence:

By completing the course, students will gain the ability to think abstractly, analytically and economically, especially through the connection of theoretical knowledge with practical examples. Based on the findings and available current information, students will be given space to express and present their attitudes and opinions how to increase innovation activity of enterprise and innovation performance of whole country. Students will also gain the ability to search, process, analyze and evaluate information in the field of research, development and innovation from various statistical sources and apply the conclusions in practical situations.

Skill:

Students are able to apply the acquired knowledge in creating an innovation project. At the same time, they develop the ability to search for, analyze and systematically process statistical and other data necessary for the management and financing of innovation activities. They will also improve their presentation and communication skills through regular evaluations and analysis of scientific papers in teamwork. Students are able to work with databases Eurostat, OECD, World Bank.

# Indicative content:

- 1. Innovation idea and the process of creating innovations.
- 2. Product innovation. Innovation of production system.
- 3. Financing of innovation, research and development

4. Economic effects of innovation. Innovation barriers and risks associated with the innovation process.

5. Institutional support for innovation. Innovation potential and its specifics.

6. Management of innovation and innovation process. Methods and techniques of innovation management

7. Evaluation of innovation activity and innovation performance

8. Current trends in innovation

# Support literature:

1. SPIŠÁKOVÁ, Emília. Analysis of innovation activity of Slovak and Czech enterprises.

Registrovaný: Web of Science. In Quality Innovation Prosperity. Košice : Technická univerzita v Košiciach. ISSN 1335-1745, 2010, vol. 14, no. 1-2, pp. 42-56 online

2. Agarwal, N. - Brem, A. Frugal Innovation and Its Implementation. Springer. 2021. ISBN 978-3-030-67119-8.

3. Daniel, D. - Brecht, L. - Ramosaj, B. Process Innovation: Enabling Change by Technology. Springer, 2018. ISBN 978-3-662-56555-1

4. Hock-Doepgen, M. - Clauss, T. et al.: Knowledge management capabilities and organizational risk-taking for business model innovation in SMEs. In: Journal of Business Research, Vol. 130<sup>+</sup>, pp. 683-697, 2021

5. Ferraris, A. - Giachino, C. - Ciampi, F. - Couturier, J.: R&D internationalization in mediumsized firms: The moderating role of knowledge management in enhancing innovation performances. In: Journal of Business Research, Vol. 128, pp. 711-718, 2021

6. Zhu, E. - Zhang, Q. - Sun, L. Enterprise Financing Mode and Technological Innovation Behavior Selection: An Empirical Analysis Based on the Data of the World Bank's Survey of Chinese Private Enterprises. In: Discrete dynamics in nature and society. 2021

7. Tidd, J. – Bessant, J. R. Managing Innovation: Integrating Technological, Market and Organizational Change, 6th Edition. US: Wiley. ISBN: 978-1-119-37945-4, 2018. pp. 608 8. Dodgson, M. Oxford Handbook of Innovation Management. Oxford University Press, 2015. pp. 720.

9. DUĽOVÁ SPIŠÁKOVÁ, Emília - GONTKOVIČOVÁ, Barbora - MURA, Ladislav

- HAJDUOVÁ, Zuzana. R & D in the context of Europe 2020 in selected countries. -Registrovaný: Web of Science. In Economic computation and economic cybernetics studies and research. - Bucharest : The Bucharest University of Economic Studies. ISSN 1842-3264, 2017, vol. 51, no. 4, pp. 243-261

10. EUROPEAN COMMISION - European Innovation Scoreboard.

11. EUROPEAN COMMISION - Regional Innovation Scoreboard.

12. Global Innovation Index

# Syllabus:

1. Innovation idea and innovation creation process - innovation idea and innovation creation process, innovation process, basic information sources for innovation activity, testing and

evaluation of innovation ideas, procedure for analysis of innovation opportunities, study of innovation feasibility. Work with the scientific article on the issue.

2. Product innovations - product life cycle, costs of innovations, process of preparation of a new product, stages of product development phase, competitiveness of innovated products. Work with the scientific article on the issue.

3. Innovations of production system - technology innovations, logistics innovations, innovative directions in the field of production technology. Work with the scientific article on the issue.

4. Financing of innovation, research and development - private and public sources of financing. Work with the scientific article on the issue.

5. Economic effects of innovation - costs of the innovation process. Innovation barriers and risks associated with the innovation process. Work with the scientific article on the issue.

6. Institutional support for innovations - institutional background for innovations in Slovakia and in the EU, framework programs of support for innovation activities, RIS3 strategy. Work with current documents of the Slovak Republic and the European Union.

7. Innovation potential and its specifics - innovation potential and its specifics in business, methodologies of evaluation of innovation potential, model of innovation potential. Work with the scientific article on the issue.

8. Innovation and innovation process management - object, degrees of innovation management, innovation efficiency and success of innovation process. Work with the scientific article on the issue.

9. Methods and techniques of innovation management - identification of techniques and innovation management, verification techniques, techniques focused on innovations in production. Work with the scientific article on the issue.

10. Evaluation of innovation activity and innovation performance - Summary Innovation Index, Global Innovation Index. Analysis of the creation of innovation index. Assessment of input parameters.

11. Current trends in innovation - lean enterprise methodology, aspects of integrated intelligent manufacturing, digital transformation and Industry 4.0, Smart Factory, Smart Industry trends. Work with the scientific article on the issue.

## Language whose command is required to complete the course:

English language / Slovak language

#### Notes:

#### Assessment of courses

Total number of evaluated students: 0

A	В	С	D	Е	FX
0.0	0.0	0.0	0.0	0.0	0.0

Lecturer: doc. Ing. Emília Duľová Spišáková, PhD.

## Date of the latest change: 28.08.2022

**Approved by:** Person responsible for the delivery, development and quality of the study programme doc. Ing. Emília Dul'ová Spišáková, PhD., Person responsible for the delivery, development and quality of the study programme doc. Ing. Silvia Megyesiová, PhD., Person responsible for the delivery, development and quality of the study programme prof. Ing. Bohuslava Mihalčová, PhD., & PhD., EUR ING., Person responsible for the delivery, development and quality of the study programme Dr. h. c. prof. RNDr. Michal Tkáč, CSc., Person responsible for the delivery, development and quality of the study programme doc. Ing. Roland Weiss, PhD.

University: University of Economics in Bratislava

Faculty: Faculty of Business Economics with seat in Košice

**Course code:** KKM **Title of course:** Multivariate Quantitative Methods for Economics PHF/PPK22902/22

Type, load and method of teaching activities:

Form of course: Lecture

Recommended load of course ( number of lessons ):

Per week: Per course: 16s

Method of study: present

Number of credits: 10

Recommended semester/trimester of study: 2.

Degree of study: III.

**Prerequisites:** 

#### **Requirements to complete the course:**

continuous written work, active self-study of the topics

presentation of the written work, defense of written work and oral exam

- semester assignment 40 %
- presentation of the final written work 60 %

#### Student workload:

- Participation in colloquia: 16 hours
- Preparation for colloquia: 44 hours
- Elaboration of a research study: 100 hours
- Preparation for the final exam: 100 hours

## **Teaching results:**

The main educational goal of the course is:

• acquaint students with the principles of multivariate quantitative analysis suitable for business and/or economics,

• teach students to apply appropriate sophisticated multivariate tools in solving practical problems in the field of economic practice,

• to support students' awareness in the selection, evaluation, identification and interpretation of the results of applied multivariate quantitative methods used.

Knowledge:

The successful graduate of the course will gain knowledge from the application of multivariate quantitative methods, which can be applied in decision-making in various areas of economic practice.

Competence:

After completing the course, the student is able to solve and analyze the problems of business and economic practice by applying appropriate multivariate statistical methods and procedures, interprets the results in a suitable way and draws conclusions based on empirical results. Skill:

The graduate can implement, perform sophisticated multivariate statistical analysis, construct multivariate models, and draw relevant conclusions from applied multivariate statistical procedures and techniques. The student applies the acquired theoretical knowledge to solve specific business and economic problems.

#### Indicative content:

- Basic concept of multivariate quantitative methods in economics.
- Multivariate regression analysis.
- Correlation. Multicollinearity.
- Generalized linear model (GLM).
- Regression trees.
- Factor and principal component analysis.
- Cluster analysis.
- Discriminant analysis.
- Logistic regression.

# Support literature:

1. CLEFF, T. (2019). Applied Statistics and Multivariate Data Analysis for Business and Economics: A Modern Approach Using SPSS, Stata, and Excel. Springer, 2019. ISBN-13: 978-3030177669.

2. PITUCH, K.A. (2016). Applied Multivariate Statistics for the Social Sciences. Routledge, 2016. ISBN-13: 978-0415836661.

3. TABACHNICK, B.G. – FIDELL, L.S. (2013). Using Multivariate Statistics. Microsoft Press, 2013. ISBN-13: 978-1292021317.

4. SHARMA, S.(1996). Applied multivariate techniques. New York, John Wiley & Sons. 1996. ISBN 0-471-31064-6.

5. KHATTREE, R. – NAIK, D. N.(2000). Multivariate data reduction and discrimination with SAS® Software. Cary, NC: SAS Institute Inc., 2000. ISBN 1-58025-696-1.

6. IZENMAN, A.L. (2008). Modern Multivariate Statistical Techniques: Regression, Classification, and Manifold Learning. Springer, 2008. ISBN-13: 978-0387781884.

#### Syllabus:

• Familiarity with the use of multidimensional quantitative methods in economics. Choosing a software product to solve tasks.

• Multidimensional regression analysis. Classic linear regression model. Estimates of model parameters, significance of the model, contribution of explanatory variables.

• Correlation. Multicollinearity. Ways to select variables. Verification of conditions.

• Generalized Linear Model (GLM).

• Regression trees: CHAID (Chi-squared automatic interaction detection), CRT (Classification and regression).

• Factor analysis and principal components analysis. Determination of the number of main components.

• Cluster analysis. Measures of similarity of objects. Hierarchical and non-hierarchical clustering procedures.

• Discriminant analysis. Assumptions, descriptive task of discriminant analysis, discriminant functions.

• Logistic regression. Estimation of model parameters, model testing, estimation of odds ratios, evaluation of logistic model quality.

# Language whose command is required to complete the course:

English language / Slovak language

Notes:

N/A

# Assessment of courses

Total number of evaluated students: 5

А	В	С	D	Е	FX	
0.0	40.0	0.0	0.0	40.0	20.0	
Lecturer: doc.	Lecturer: doc. Ing. Silvia Megyesiová, PhD.					
Date of the late	Date of the latest change: 15.08.2022					
<b>Approved by:</b> Person responsible for the delivery, development and quality of the study programme doc. Ing. Emília Dul'ová Spišáková, PhD., Person responsible for the delivery, development and quality of the study programme doc. Ing. Silvia Megyesiová, PhD., Person responsible for the delivery, development and quality of the study programme prof. Ing. Bohuslava Mihalčová, PhD. & PhD., EUR ING., Person responsible for the delivery, development and quality of the study programme Dr. h. c. prof. RNDr. Michal Tkáč, CSc., Person responsible for the delivery, development and quality of the study programme doc. Ing. Roland Weiss, PhD.						

<b>University:</b> University of Economics in Bratislava
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Faculty: Faculty of Business Economics with seat in Košice

**Course code:** KKM **Title of course:** Private Equity

PHF/PPK22931/22

#### Type, load and method of teaching activities:

Form of course: Lecture

Recommended load of course ( number of lessons ):

Per week: Per course: 16s

Method of study: present

Number of credits: 10

Recommended semester/trimester of study: 3.

Degree of study: III.

**Prerequisites:** 

#### **Requirements to complete the course:**

30% - active participation in colloquia, presentation of a selected topic

30% - research study

40% - final exam

#### Student workload:

Participation in colloquia: 16 hours Preparation for colloquia: 44 hours Elaboration of a research study: 100 hours Preparation for the final exam: 100 hours

#### **Teaching results:**

The main educational goal of the course is to survey the private equity industry and to provide students with an understanding of the origination, valuation, execution, monitoring, and realization of private equity transactions and of the process of investing in private equity funds. The course will teach specific skills and concepts used in the practice of private equity and apply case discussions through which those skills and concepts will be illustrated.

Students will acquire the following knowledge:

- knowledge of the private equity investment process and its analytical framework
- in-depth understanding of the private equity markets

• theoretical and conceptual tools used in private equity deals

- Students will acquire the following competencies in case of successful completion of the course:
- to invest in companies that are not publicly traded on a stock exchange
- to invest as part of buyouts of publicly traded companies
- to understand the harvesting through IPO or M&A

Students will acquire the following skills in case of successful completion of the course:

• ability to apply financial concepts and techniques to analyse activities and enterprises in the private equity market

- ability to create private equity funds
- advise and grow the business via private equity

## Indicative content:

• What is Private Equity and Venture Capital

• Private Equity as an Economic Driver

- Investment strategies & opportunity screening
- Modern Private Equity
- The Private Markets Ecosystem
- Role of Debt
- Valuation
- Acquisition Process
- Monitoring & Exiting investments
- Public infrastructure investments
- Private Equity and Ethics

#### Support literature:

1. DEMARIA, C. Introduction to Private Equity, Debt and Real Assets: From Venture Capital to LBO, Senior to Distressed Debt, Immaterial to Fixed Assets. John Wiley & Sons, 2020.

2. DEMARIA, C. (2020). Introduction to Private Equity, Debt and Real Assets: From Venture Capital to LBO, Senior to Distressed Debt, Immaterial to Fixed Assets. John Wiley & Sons 3. GILLIGAN, J., & WRIGHT, M. (2020). Private equity demystified: An explanatory guide. Oxford University Press.

4. PIGNATARO, P. (2013). Financial modeling and valuation: a practical guide to investment banking and private equity (Vol. 876). John Wiley & Sons.

5. SCHELL, J. M. (2021). Private equity funds: Business structure and operations. Law Journal Press.

6. STOWELL, D. P. (2017). Investment banks, hedge funds, and private equity. Academic Press.7. ZEISBERGER, C., PRAHL, M., & WHITE, B. (2017). Mastering Private Equity Set. John Wiley & Sons.

#### Syllabus:

• The private equity process from initially determining the size of the fund, through fund raising, sourcing portfolio investments, acquiring the portfolio companies and converting equity value back to cash by liquidating portfolio holdings.

• Overview of the evolution of the private equity industry, the objectives and perspectives of institutional investors in private equity funds, the incentive and information problems that private investors in private equity funds face and their responses to these problems.

• Valuation techniques in a highly leveraged setting, how private equity firms create value and how deals are structured to realize such value.

• Exit options and pros and cons of each. The concept of multiple stakeholders in a company who do not necessarily share the same attitude towards the exit, but whose concerns need to be satisfied or at least addressed.

• Public-Private Partnerships (PPPs) and situations in which they are better than conventional, regulated privatization.

• Cultural, legal, ethical and moral issues surrounding the use of private equity. Matters of confidentiality, transparency, corporate governance, self-regulation and legislative acts.

• Recommended database for working with data - Database of bonds issued on the primary market.

## Language whose command is required to complete the course:

Slovak language / English language

#### Notes:

N/A

#### Assessment of courses

Total number of evaluated students: 0

А	В	С	D	Е	FX	
0.0	0.0	0.0	0.0	0.0	0.0	
Lecturer: doc. 1	PhDr. Ing. Rober	t Verner, PhD., N	/IBA			
Date of the late	Date of the latest change: 15.08.2022					
<b>Approved by:</b> Person responsible for the delivery, development and quality of the study programme doc. Ing. Emília Dul'ová Spišáková, PhD., Person responsible for the delivery, development and quality of the study programme doc. Ing. Silvia Megyesiová, PhD., Person responsible for the delivery, development and quality of the study programme prof. Ing. Bohuslava Mihalčová, PhD. & PhD., EUR ING., Person responsible for the delivery, development and quality of the study programme Dr. h. c. prof. RNDr. Michal Tkáč, CSc., Person responsible for the delivery, development and quality of the study programme doc. Ing. Roland Weiss, PhD.						

University: University	University: University of Economics in Bratislava			
Faculty: Faculty of E	Business Economics with seat in Košice			
Course code: KEM PHF/ PPEM22904/22	M PHF/			
Form of course: Le	l of course ( number of lessons ): rse: 16s			
Number of credits: 1				
Recommended seme	ester/trimester of study: 1.			
Degree of study: III.				
Prerequisites:				
Requirements to complete the course: project, exam • elaboration and presentation of the project - 15% • consultation activity - 25% • final oral exam - 60%				
• project elaboration	ve forms of learning - 56 hours			
about science, method problems. Acquire pro- and data synthesis. A Knowledge: • about the paradigm • on the specifics of t • the principles and p • on methods and tec Competence: • work with knowled • evaluate data with r • independently resea • formulate scientific • discuss and argue a Skill:	he functioning of science and research principles of publishing, hniques of scientific work ge of significant scientific works and research research activity, arch and draw conclusions, knowledge, bout knowledge of science and research.			

- deal with the methodological apparatus,
- communicate in scientific language.

#### Indicative content:

- 1. Fundamentals of science
- 2. Scientific research
- 3. The Importance of Literature Review in Scientific Research Writing
- 4. Writing the scientific paper
- 5. Scientific communication development and current trends.
- 6. Rhetoric
- 5. Research methods and thought processes.
- 6. Ethics publishing

#### Support literature:

1. SAUNDERS, M. –LEWIS, P. – THORNHILL, A. 2019. Research methods for business students. Eight edition. Harlow: Pearson, 2019. ISBN 9781292208787.

2. BRIAN, T. 2008. Towards an Analytical Framework of Science Communication

Models. Communicating Science in Social Contexts. Springer, Dordrecht. https://doi.org/10.1007/978-1-4020-8598-7\_7

 DOUGHERTY M. V., 2019. "The Pernicious Effects of Compression Plagiarism on Scholarly Argumentation," Argumentation (2019). https://doi.org/10.1007/s10503-019-09481-3.
WILSON, E. Bright. An Introduction to Scientific Research. Kindle Edition. Dover Publications, Inc.; 1st edition, 2003. 479 s. ISBN 978-0486665450.

#### Syllabus:

- The concept of science, three rules of science, the scientific method.
- What is Scientific Research and How Can it be Done? Classification of Scientific Research.

How to Conduct Scientific Research? Specific features and components of current science and research.

• How to Conduct Literature Surveys Using Multidisciplinary Databases. How To write a good scientific literature review.

- How to write the paper in the properly.
- The importance of scientific communication
- Principles of scientific communication. The art and science of effective communication.
- The art of the figures of speech, the ability to use language effectively.

• Defining research method. The types of research methods. Process Research Methods and Their Application.

• Publication ethics meaning, Ethics definition. Respect for the rights of human subjects in research.

#### **Language whose command is required to complete the course:** English language / Slovak language

# Notes:

N/A

## Assessment of courses

Total number of evaluated students: 9

А	В	С	D	Е	FX
22.22	11.11	33.33	22.22	11.11	0.0

Lecturer: prof. Ing. Bohuslava Mihalčová, PhD. & PhD., EUR ING.

**Date of the latest change:** 27.08.2022

**Approved by:** Person responsible for the delivery, development and quality of the study programme doc. Ing. Emília Dul'ová Spišáková, PhD., Person responsible for the delivery, development and quality of the study programme doc. Ing. Silvia Megyesiová, PhD., Person responsible for the delivery, development and quality of the study programme prof. Ing. Bohuslava Mihalčová, PhD. & PhD., EUR ING., Person responsible for the delivery, development and quality of the study programme Dr. h. c. prof. RNDr. Michal Tkáč, CSc., Person responsible for the delivery, development and quality of the study programme doc. Ing. Roland Weiss, PhD.

University: University of Economics in Bratislava				
Faculty: Faculty of Business Economics with seat in Košice				
Course code:Title of course: ScientificDekanát PHF/TČ1/22	Title of course: Scientific activities I.			
Type, load and method of teaching activities: Form of course: Recommended load of course ( number of lessons ): Per week: Per course: Method of study: present				
Number of credits: 20				
<b>Recommended semester/trimester of study:</b> 3.,	4			
Degree of study: III.				
Prerequisites:				
Requirements to complete the course:				
Student workload:				
Teaching results:				
Indicative content:				
Support literature:				
Syllabus:				
Language whose command is required to comp	plete the course:			
Notes:				
Assessment of courses Total number of evaluated students: 6				
NZ Z				
0.0 100.0				
Lecturer:				
Date of the latest change: 27.08.2022				
	PhD., Person responsible for the delivery, doc. Ing. Silvia Megyesiová, PhD., Person ality of the study programme prof. Ing. Bohuslava ponsible for the delivery, development and quality chal Tkáč, CSc., Person responsible for the			

University: University of Economics in Bratislava				
Faculty: Faculty of Business Economics with seat in Košice				
Course code:Title of course: ScientificDekanát PHF/TČ2/22	Title of course: Scientific activities II.			
Type, load and method of teaching activities: Form of course: Recommended load of course ( number of les Per week: Per course: Method of study: present	sons ):			
Number of credits: 40				
<b>Recommended semester/trimester of study:</b> 5.,	6, 7., 8			
Degree of study: III.				
Prerequisites:				
Requirements to complete the course:				
Student workload:				
Teaching results:				
Indicative content:				
Support literature:				
Syllabus:				
Language whose command is required to comp	plete the course:			
Notes:				
Assessment of courses Total number of evaluated students: 8				
NZ Z				
0.0 100.0				
Lecturer:				
Date of the latest change: 27.08.2022				
	PhD., Person responsible for the delivery, doc. Ing. Silvia Megyesiová, PhD., Person ality of the study programme prof. Ing. Bohuslava ponsible for the delivery, development and quality chal Tkáč, CSc., Person responsible for the			