COURSE DESCRIPTION

University: *University of Presov*	
Faculty/university workplace: *Faculty of Management and Business*	
Code: 7KFUM/APLST-ER/24	**Course title:** *Applied Statistics*
Type, scope and method of educational activity: *Type of educational activities: lectures and seminars* *Scope of educational activities: 1 hour lecture / 1 hour seminar per week* *Method of educational activities: combined; max. 30% distance, via MS Teams, Moodle or other applications and platforms*	
Number of credits: *4*	
Recommended semester: *summer*	
Study grade: *2.*	
Prerequisites: -	
Conditions for passing the course: *Continuous evaluation:* - *Active participation in seminars and lectures (maximum of 10%).* - *Elaboration of solutions to examples from the textbooks (maximum of 20%).* *Final evaluation:* - *Final written test (exam) (maximum of 70%).* *The overall evaluation will consist of the sum of points (%) from continuous evaluation and points (%) from final written test (exam).* *Criteria for success (percentage expression of the results at the assessment of courses) are for the classification grades as follows: A: 100,00 – 90,00%; B: 89,99 – 80,00%; C: 79,99 – 70,00%; D: 69,99 – 60,00%; E: 59,99 – 50,00%; FX: 49,99 and less %.* *Passing the course is conditioned by successful passing of all mentioned conditions and fulfillment of the conditions of participation according to the Study Regulations of University of Presov.*	
Learning outcomes: *After completing the course, students have the following abilities:* *Knowledge:* - *explain scientific terminology in the field of statistics;* - *select suitable statistical methods.* *Skills:* - *apply statistical principles in the course of writing theses;* - *apply statistical principles for decision making purposes;* - *analyze statistical data; work with statistical datasets;* - *acquire, study and analyze statistical datasets;*	

- *process datasets;*
- *use statistical software;*
- *prepare scientific reports;*

Competences:

- *accuracy and precision in working with data and various data sources;*
- *understand limitations of statistical data analysis;*
- *ability of systematic and analytical thinking;*
- *ability to draw conclusions from statistical data analysis;*
- *ability to prepare, and present results of a statistical manner to different stakeholders.*

Course content:

1. *Statistics. Basic Terminology.*
2. *Stages of Quantitative Research. Basic Terminology.*
3. *Questionnaire.*
4. *Research Sample.*
5. *Descriptive Statistics.*
6. *Inductive Statistics. Hypothesis Testing.*
7. *Parametric Tests.*
8. *Non-Parametrics Tests.*
9. *Correlation Analysis. Pearson and Spearman Correlation Coefficient.*
10. *Contingency. Chi-square Test of Independence.*
11. *Simple Linear Regression.*
12. *Multiple Linear Regression.*
13. *Examples of Statistical Analyses in Software.*

Recommended literature:

LEVIN, J. A., FOX, J. A., FORDE, D. R. 2017. Elementary Statistics in Social Research – updated 12th edition. New York: Pearson. ISBN 978-0-13-442776-8.

LYÓCSA, Š., MOLNÁR, P., PLÍHAL, T., ŠIRAŇOVÁ, M., 2020. Impact of macroeconomic news, regulation and hacking exchange markets on the volatility of bitcoin. In: Journal of economic dynamics a control. Č. 119, s. 1-20. ISSN 0165-1889. ISSN 1879-1743.

HORVÁTH, R., LYÓCSA, Š., BAUMÖHL, E. 2018. Stock market contagion in Central and Eastern Europe: unexpected volatility and extreme co-exceedance. In: The European Journal of Finance. Roč. 24, č. 5, s. 391-412. ISSN 1351-847X. ISSN (online) 1466-4364.

LYÓCSA, Š., VAŠANIČOVÁ, P., MISHEVA, B. H., VATEHA, M. D., 2022. Default or profit scoring credit systems? Evidence from European and US peer-to-peer lending markets. In: Financial innovation. Roč. 8, č. 1, s. 1-21. ISSN 2199-4730.

Language which is necessary to complete the course: *English*

Notes:

Workload distribution:

24% of workload – direct learning at the institution.

26% of workload – elaboration of solutions to examples from the textbooks.

50% of workload – self-study, preparation on the exam.

Students with specific requirements or special needs will be supported and will have tailor made access to the course based on the recommendation of the faculty coordinator for students with special needs.

Course evaluation

Total number of students evaluated: *0*

A	B	C	D	E	FX
0%	0%	0%	0%	0%	0%

Lecturers: *Lectures and seminars: doc. PhDr. Petra Vašaničová, PhD.*

Date of last change: *12.4.2024*

Approved by: prof. Ing. Róbert Štefko, Ph.D.