Course unit Descriptor	**Faculty of Economics Subotica**	UNIVERZITET U NOVOM SADU UNIVERSITY OF NOVI SAD

GENERAL INFORMATION

Study program in which the course unit is offered	Business Informatics
Course unit title	Multivariate Analysis
Course unit code	MS-525
Type of course unit[1]	Compulsory
Level of course unit[2]	Second
Semester when the course unit is offered	Summer
Year of study (if applicable)	-
Number of ECTS allocated	6
Name of lecturer/lecturers	Mirko Savić, Dejan Brcanov
Mode of course unit delivery[3]	Face-to-Face, Distance learning
Course unit pre-requisites (if any)	-

PURPOSE AND OVERVIEW (max 5-10 sentences)

Introducing students to the basic concepts of multivariate statistical analysis through use of statistical software, with a special focus on big data and use of EUROSTAT databases.

LEARNING OUTCOMES (knowledge and skills)

Student will know to use statistical software to implement multivariate statistical methods for the purpose of providing support in economic decision-making processes.

SYLLABUS (outline and summary of topics)

Theory
- Introduction to multivariate statistical analysis
- Introduction to EUROSTAT database
- Multivariate regression and correlation analysis

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[1] Compulsory, optional
[2] First, second or third cycle (Bachelor, Master's, Doctoral)
[3] Face-to-face, distance learning, etc.

- MANOVA
- Discriminant analysis
- Cluster analysis
- Principal components analysis
- Factor analysis
- Multidimensional scaling

Practice Laboratory exercise

LEARNING AND TEACHING (planned learning activities and teaching methods)

Questioning, work in computer laboratory, key studies, problem-solving, small group activities.

REQUIRED READING

1. Cooper, D. R., Schindler P. S. (2001), Business Research Methods, McGraw-Hill Irwin, USA.
2. Myers, J. H., Mullet, G. M. (2002), Managerial Applications of Multivariate Analysis in Marketing, American Marketing Association, Chicago, USA.
3. Rencher, C. A. (2002). Methods of Multivariate Analysis, Wiley - Interscience, New York.
4. Tabachnick, G., Fidell, L. (2013). Using Multivariate Statistics, Pearson Education, Inc: Boston

ASSESSMENT METHODS AND CRITERIA

Written exam – 50.
Seminar – 50.

LANGUAGE OF INSTRUCTION

English