Study programme(s): Informatics (IM), Teaching Informatics (IC)

Level: master

Course title: Applied statistics (code: IA143)

Lecturers: Zorana L. Lužanin, Sanja Đ. Rapajić

Status: obligatory for IC study programme, for IM obligatory for *Computer science* module; elective for other modules

ECTS: 7

Requirements: none

Learning objectives

To enable students to understand and use the basic statistical methods and available software tools, as well as to be familiar with the current trends in the field.

Learning outcomes

Student should be able to:

- understand statistical methodology
- make a plan for a statistical research
- choose appropriate data
- apply statistical analysis
- interpret the obtained results

Syllabus

- basic concepts of the probability and statistics
- sampling
- testing hypothesis
- variance analysis
- correlation
- regression analysis: linear simple regression, multiple regression
- factor analysis
- processing in the packages SPSS and STATISTICA

Literature

1. J. P. Marques de Sa: Applied Statistics Using SPSS, STATISTICA, MATLAB and R, Springer, 2007.
2. M. H. Kutner, C.J.Nachtsheim, J. Neter, W. Li: Applied Linear Statistical Model, McGraw-Hill, 2005.
3. Aczel-Sounderpandian: Business Statistics, 7th edition, McGraw-Hill, 2008.

Weekly teaching load				Other:
Lectures: 3	Exercises: 2	Other forms of teaching:	Student research:	

Teaching methodology

The materials are presented through various examples with the active participation of students. Frontal way of presenting theoretical basics of the statistical analysis follows the students work in groups and their usage of statistical software tools.

Grading (maximum number of points 100)

Pre-exam obligations	**points**	**Final exam**	**points**
homework	30	oral exam	40
seminar(s)	30		