Specification of the course for the Book of courses

Study program	Applied statistics	
Title of the course	**Statistical software**	
Teachers (for lectures)	Miroslav Ristić	
Teacher/fellow teacher (for exercises)	Miodrag Đorđević	
ESPB	4	**Status of the course (obligatory (O) /elective (E))**	O

Conditions	none
Aim of the course	The aim of this course is to introduce students to work in the statistical software.
Course outcomes	Students will be trained to use statistical software for complex statistical analysis. Students will understand the data matrix to the extent necessary for statistical analysis. Students will meet environment of statistical software (SPSS, Statistica, R. ..).

Content of the course

Theoretical classes	Data matrix. Control data input (mask input, dual input), error correction, archiving, confidentiality, ethics information, handling. Basics statistical analysis programs for tabulation (Microsoft Excel, Calc Libre Office). Statistical package SPSS (using a programming language syntax and Matrix), Statistica, R. Introduction to Programming in SAS. Introduction to programming in R.
Practical classes	Content of practical classes follows theoretical classes. The realization of all theoretical content with practical training on computers.

References

1	Dalgaard, P. (2002) Introductory Statistics with R, Springer. ISBN 0-387-95475-9
2	Venables, W.N., Ripley, B.D.: Modern Applied Statistics with S, Springer, 4th ed., 2002
3	Deep, R.: Probability and Statistics: With Integrated Software Routines, Academic Press, 2005
4	Field, A.(2005) Discovering Statistics Using SPSS (Introducing Statistical Methods S.) Sage Publications Ltd; 2nd edition.
5	Pallant, J. (2007) SPSS Survival Manual: A Step by Step Guide to Data Analysis Using SPSS for Windows, Open University Press; 3 edition.
6	Kasum D., Legović T. (2004) Uvod u korištenje R-a http://cran.r-project.org/doc/contrib/Kasum+Legovic-UvodUr.pdf (Serbian).

The number of contact hours per week during the semester / trimester / year

Lectures	Exercises	DON	Research work	Other classes
1	2	----	------	------

Teaching methods	Lectures, exercises, individual work on computer (1 student per 1 computer).

Evaluation of knowledge (maximum score 100)

Pre exam duties	points	Final exam	points
Activity during lectures	5		40
Practical classes	5		
colloquia	50		