Specification of the course for the Book of courses

Study program		Applied statistics	
Title of the course		Statistics III	
Teachers (for lectures)		Miroslav Ristić	
Teacher/fellow teacher (for exercises)		Milan Jovanović	
ESPB	6	**Status of the course (obligatory (O) /elective (E))**	O

Conditions	
Aim of the course	The aim of the course is to introduce student to some linear statistical models and time series analysis.
Course outcomes	Student will understand the concepts of Analysis of variance, linear regression and time series analysis. He will be able to solve problems in these areas using statistical software.
Content of the course	
Theoretical classes	One-way analysis of variance. Duncan, Tukey and Bonferonni methods for multiple comparison. Two-way analysis of variance. Linear regression. Least squares method. Standard error estimates. Polynomial regression. Generalized linear model. Logistic regression. Time series. Tests for randomness. AR and MA models for tim series.
Practical classes	Practical classes follow theoretical through solving exercises and examples using statistical software.
References	
1	Larsen, R. J, Marx, M. L: An Introduction to Mathematical Statistics and its Applications, Pearson, 2006.
2	Cohen, Y., Cohen, J. Y. (2008) Statistics and Data with R, Wiley.
3	Jevremović, V.:Verovatnoća i statistika, Matematički fakultet, Beograd, 2009.
4	Jevremović, V, Mališić, J: Statističke metode u meteorologiji i inženjerstvu, Beograd 2002.
5	Mališić, J: Vremenske serije, Matematički fakultet, Beograd, 2002.
6	Milton J.J, McTeer P.M, Corbet, J.J: Introduction to Statistics, Mcgraw-Hill, 1997.

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

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

Teaching methods	Lectures, exercises and practical work

Evaluation of knowledge (maximum score 100)

Pre exam duties	points	Final exam	points
homework	10	**Oral exam**	50
colloquia	40		