

<b>Study program:</b> Bachelor academic studies: ECOLOGICAL ECONOMICS (BASEE)			
<b>Type and level of studies:</b> Bachelor academic studies, I level			
<b>Subject name: Biostatistics and Experimental Design</b>		<b>Subject code</b>	6E1STA
<b>Professor: dr Svetlana Zivković Radeta, assistant professor</b>			
<b>Subject status:</b> Elective			
<b>Number of ECTS points:</b> 5			
<b>Condition:</b> none			
<b>Subject goal</b> Students will learn about practical aspects of biostatistics, mode of operation and methods of making assignments, as well as ways of dealing with the most common practical problems. In addition, students are trained to use appropriate statistical programs. The ultimate goal is to make students able to solve specific problems (collect data, choose the appropriate statistical methods, processing and interpreting the data adequately).			
<b>Subject outcome</b> The knowledge acquired during classes should enable the student to independently solve practical problems from practice that they will have to deal with after graduation and later in the development of master and doctoral theses, scientific papers. In addition, students will be able to use programs MS Excel and SPSS for statistical data processing.			
<b>Subject content:</b>  <i>Theoretical classes</i> The concept and the subject of biostatistics. Introduction to Biostatistics. Statistical collection. Methods of data collection. Variance and standard deviation. Descriptive statistical analysis (editing data, tables and graphic data, the arithmetic mean, geometric mean, mode, median, range (range) percentile). Distribution of data. Confidence interval. Fundamentals of probability theory. Random variables. Evaluation of parameters. Testing statistical hypotheses. One-way analysis of variance. Simple linear correlation and regression. <i>Practical classes</i> Data from experimental investigations are used in the examples and exercise, and the students are introduced to the use of MS-Excel and the SPSS during the statistical data analysis. Students will use computers in exercises.			
<b>Literature</b> 1. I. Kovačević, <i>Verovatnoća i statistika</i> , Univerzitet Singidunum, Beograd 2012. 2. B. Popović: <i>Matematička statistika i statičko modelovanje</i> , PMF Niš, 2002. 3. M. Šekarić. <i>Statističke metode sa zbirkom zadatka</i> , Univerzitet Singidunum, Beograd, 2011. 4. D.W.Wayne: <i>Biostatistics: A Foundation for Analysis in the Health Sciences</i> , 7th, John Wiley&Sons Inc., New York 1999			
<b>Number of active teaching classes</b>			Other classes
Lectires: 2 (30)	Practical classes: 1 (15)	Other class forms:	Study research paper:
<b>Teaching methods:</b> Classical methods of teaching are used in lectures. In addition to drafting tasks that follow theoretical classes, students in the exercises use computers in solving problems.			
<b>Knowledge evaluation(maximum number of points is 100)</b>			
<b>Pre-exam obligations</b>	<b>points</b>	<b>Final exam</b>	<b>points</b>
Activity during lectures	10	Written exam	30
Practical classes	20	Oral exam	20
colloquiums	20		