

<b>Course title: Statistics</b>			
<b>Lecturers: Zagorka Lozanov-Crvrnković, Danijela Ćirić-Rajter</b>			
<b>Status:</b> obligatory/elective <b>elective</b>			
<b>ECTS:</b> 15			
<b>Requirements:</b> none			
<b>Learning objectives</b> The aim of course is to introduce to the students the advanced statistical methods which are in education and data analysis.			
<b>Learning outcomes</b> After taking the course, the student should have developed: <b>General capabilities:</b> basic knowledge of this field, following the literature, analysis of various solutions and the choice of most adequate solution, application in practice and other subjects. <b>Subject-specific capabilities:</b> Student will be able for the research in science and mathematics education using statistical methods.			
<b>Syllabus</b> <i>Theoretical instruction</i> Estimation of parameters. Testing statistical hypothesis, Analysis of variance. Regression – linear, nonlinear, multiple. Model coefficients testing, analysis of residuals. <i>Students research</i> Following the theoretical instructions, students will apply the given statistical method to the real world data.			
<b>Suggested literature:</b> <ol style="list-style-type: none"> <li>1) З. Лозанов-Црвенковић, Статистика, ПМФ, Нови Сад, 2012.</li> <li>2) 3) З. Лозанов-Црвенковић, Д. Рајтер Збирка решених задатака из вероватноће и статистике, ПМФ, Нови Сад 1999.</li> <li>3) Биљана Поповић, Математичка статистика и статистичко моделовање, ПМФ Ниш, 2002</li> <li>4) М. Меркле, П. Васић Вероватноћа и статистика, Електротехнички факултет, Београд, 1998.</li> <li>5) Hogg, R.V., Craig, A. T., Introduction to Mathematical Statistics, Macmillian Publishing Co., Inc., New York, 1978.</li> </ol>			
<b>Weekly teaching load</b>			<b>Other:</b>
Lectures: 5	Exercises:	Other forms of teaching:	
Student research: 5			
<b>Teaching methodology</b> Lectures, solving problems with and without the use of computers. Laboratory exercises and colloquiums in the PC lab.			
<b>Grading (maximal number of points 100)</b>			
<b>Pre-exam requirements</b>	points	<b>Final exam</b>	points
Activities during lectures		Oral exam	<b>50</b>
Practical teaching			
Colloquia	<b>50</b>		
Seminar papers			