Course title: Selected Chapters of Probability and statistic-didactical approach

Lecturers: Zagorka Lozanov-Crvrnković, Danijela Ćirić-Rajter

Status: obligatory/elective elective

ECTS: 15

Requirements: none

Learning objectives

The aim of course is to introduce the students to the methodical techniques of teaching Probability and statistics **Learning outcomes** After taking the course, the student should have developed:

General capabilities: basic knowledge of this field, following the literature, analysis of various solutions and the choice of most adequate solution, application in practice.

Subject-specific capabilities: Student will be able for the research in science and mathematics education.

Syllabus

Theoretical instruction

Definition of probability, conditional probability. Bayes formula. Random variables, distribution function, probability distribution function. Numerical characteristics of random variables. Basic notions in Statistics, population, random sample. Testing statistical

Students research

Following the theoretical instructions, students will develop the ability to apply different didactical methods and approaches to different contents of probability and statistics.

Weekly teaching	Other:				
Suggested liter					
1) Н.А. Ширјаев, Вјеројатност, Наука, 1980.					
2) П. Младеновић, Вероватноћа и статистика, Веста, Београд					
3) З. Лозанов-Црвенковић, Д. Рајтер Збирка решених задатака из вероватноће и					
статистике, ПМФ, Нови Сад 1999.					
4) М. Меркле, П. Васић Вероватноћа и статистика, Електротехнички факултет, Београд,					
1998					
5) D. R. Cox, Christl A. Donnelly, Principles of Applied Statistics, Cambridge University					
Press, 2011	gested merature:I.A. Ширјаев, Вјеројатност, Наука, 1980.I. Младеновић, Вероватноћа и статистика, Веста, Београд. Лозанов-Црвенковић, Д. Рајтер Збирка решених задатака из вероватноће итистике, ПМФ, Нови Сад 1999.1. Меркле, П. Васић Вероватноћа и статистика, Електротехнички факултет, Београд,80. R. Cox, Christl A. Donnelly, Principles of Applied Statistics, Cambridge Universityss, 2011tures:Exercises:Other forms of teaching:Student research:5				
Lectures:	Exercises:	Other forms of teaching:	Student research:		
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Teaching methodology

Lectures, solving problems with and without the use of computers. Laboratory exercises and colloquiums in the PC lab.

Grading (maximal number of points 100)					
Pre-exam requirements	points	Final exam	points		
Activities during lectures		Oral exam	50		
Practical teaching					
Colloquia	50				
Seminar papers					