
	<b>UNIVERSITY OF EAST SARAJEVO</b> Faculty of Philosophy					
	<b>Study programs: Mathematics and informatics, Mathematics and Physics</b>					
	Bachelor	IV - year of studies				
<b>Full course title</b>	<b>PROBABILITY AND STATISTICS</b>					
<b>Chair</b>	Department of Mathematics - Faculty of Philosophy					
<b>Course code</b>	<b>Status</b>		<b>Semester</b>	<b>ECTS</b>		
MP8-3	O		VIII	5		
<b>Lecturer/s</b>	Assist. Prof. Valentina Timotic, PhD					
<b>Teaching assistant/s</b>	Ognjen Papaz					
<b>Number of classes / teaching workload (weekly)</b>			<b>Individual workload (number of hours per semester)</b>		<b>Individual workload coefficient <math>S_o^1</math></b>	
<b>L</b>	<b>AE</b>	<b>LE</b>	<b>L</b>	<b>AE</b>	<b>LE</b>	<b><math>S_o</math></b>
2	2	0	45	45	0	1,5
total teaching workload (number of hours per semester) 60h			total individual workload (number of hours per semester) 90h			
Total course workload (teaching + individual): 150 hours per semester						
<b>Learning outcomes</b>	<ol style="list-style-type: none"> <li>1. Getting familiar with basic concepts of probability.</li> <li>2. The student got knowledge of the probabilistic measure.</li> <li>3. Application of statistics in many other disciplines.</li> </ol>					
<b>Requirements</b>	No.					
<b>Teaching methodology</b>	lecture, exercise and application					
<b>Course content (by week)</b>	<ol style="list-style-type: none"> <li>1. Probability space (<math>\Omega, F, P</math>).</li> <li>2. Kolmogorov's axioms and corollaries.</li> <li>3. Conditional probability.</li> <li>4. Independence of events.</li> <li>5. Random variable.</li> <li>6. Numerical characteristics of random variables.</li> <li>7. Distributions.</li> <li>8. Characteristic function.</li> <li>9. Different types of convergence.</li> <li>10. Central limit theorem.</li> <li>11. Aims and tasks of mathematical statistics.</li> <li>12. Estimates of distribution parameters.</li> <li>13. Confidence intervals.</li> <li>14. Statistical hypothesis testing.</li> <li>15. Linear regression.</li> </ol>					
<b>Compulsory reading list</b>						
<b>Author</b>	<b>Title, publisher</b>			<b>Year</b>	<b>Pages (from-to)</b>	
M. Merkle, P. Vasic	Verovatnoca i statistika- sa primenama i primerima, Elektrotehnicki fakultet Beograd			1995.		
S.M. Ross	A first course in probability, Pearson Prentice Hall			2010.		
<b>Complementary reading list</b>						
<b>Author/s</b>	<b>Title, publisher</b>			<b>Year</b>	<b>Pages (from-to)</b>	

Obligations, forms of assessment and grading	Types of student work evaluation		Points	Percentage
	Pre-exam obligations			
	e.g. attendance of lectures/exercises		10	10
	e.g. positively graded project/essay		10	10
	e.g. test/colloquia 1		20	20
	e.g. test/colloquia 2		20	20
	Final exam			
	e.g. final exam (oral/written)		40	40
TOTAL		100	100 %	
Web page	ffuis.edu.ba			
Date of verification				