

**(Table 5.2) Course unit description**

<b>Study program:</b> Economics and business management; Business informatics			
<b>Type and level of studies:</b> Undergraduate academic studies (first level)			
<b>Course unit:</b> Fundamentals of Statistics			
<b>Teachers in charge:</b> Marina Milanović & Milan Stamenković			
<b>Language of instruction:</b> English			
<b>ECTS:</b> 8			
<b>Prerequisites:</b> None			
<b>Semester:</b> Summer			
<b>Course unit objective:</b>			
<ul style="list-style-type: none"> <li>• Introducing students to the logic and concept of statistical thinking, as well as the importance and possibilities of its application in the study of economic phenomena;</li> <li>• Introducing students to the characteristics, advantages and limitations of fundamental statistical indicators and methods used in economics, business economics and management;</li> <li>• Enabling students for independent, valid and correct application of elaborated statistical methods and correct interpretation of the obtained results.</li> </ul>			
<b>Learning outcomes of Course unit</b>			
<ul style="list-style-type: none"> <li>• Acquiring knowledge of key statistical concepts and essential definitions of elaborated statistical indicators and methods;</li> <li>• Acquisition of analytical skills for valid application of elaborated fundamental statistical methods and correct interpretation of calculated statistical indicators and derived statistical models;</li> <li>• Proper “reading” and interpretation of results obtained using appropriate statistical software packages, and consequently, drawing adequate conclusions.</li> </ul>			
<b>Course unit contents</b>			
<ul style="list-style-type: none"> <li>• Fundamental statistical concepts</li> <li>• Methods of descriptive statistical analysis</li> <li>• Random variable and probability distributions</li> <li>• Sample, sample statistics and sampling distributions</li> <li>• Statistical inference (Statistical Estimation and Hypothesis Testing)</li> <li>• Simple correlation and regression analysis</li> <li>• Dynamic analysis (Index numbers and Introduction to time series analysis)</li> </ul> <p>Course teaching also includes solving tasks and examples from practice (including introduction to the use of selected statistical software packages).</p>			
<b>Literature</b>			
Bluman, A. (2018). <i>Elementary Statistics: a step by step approach</i> , 10 <sup>th</sup> edition. New York: McGraw Hill Ed.			
Gupta, S.C. & Kapoor, V.K. (2007). <i>Fundamentals of Applied Statistics</i> . New Delhi: Sultan Chand & Sons.			
<b>Number of active teaching hours</b>			<b>Other classes</b>
Lectures: 3	Practice: 2	Other forms of classes	
<b>Teaching methods</b>			
For five and less students – mentoring system; more than five students – classroom lectures.			
<b>Examination methods (maximum 100 points)</b>			
<b>Exam prerequisites</b>	<b>No. of points:</b>	<b>Final exam</b>	<b>No. of points:</b>
Student’s activity during lectures	<b>4</b>	written examination	<b>10</b>
practical classes / tests		oral examination	<b>50</b>
Seminars / homework	<b>2</b>		
Colloquiums	<b>34</b>		
Other			