



<b>Study program:</b> Integrated Academic Studies in Pharmacy			
<b>Course title:</b> Software Data Processing			
<b>Teacher:</b> Mihalj M. Poša, Ana S. Pilipović, Vesna B. Tepavčević, Zita J. Farkaš Agatić, Kosta J. Popović			
<b>Course status:</b> elective			
<b>ECTS Credits:</b> 3			
<b>Condition:</b> Mathematics; Statistics			
<b>Course aim</b> Getting to know the application of some ready-made software package for statistical data processing. These packages allow the application of many statistical methods (hypothesis testing, parameter estimation, factor analysis, regression analysis) quickly and easily with the possibility of error to a minimum.			
<b>Expected outcome of the course:</b> Basic elements of statistics Processing of experimental data using software packages			
<b>Course description</b> <i>Theoretical education</i> <ol style="list-style-type: none"> <li>1. Introduction: The use of computers in statistics</li> <li>2. Preparation and organization of data</li> <li>3. Entering data,</li> <li>4. Table of frequencies, contingency tables</li> <li>5. Measures of centeredness and distribution</li> <li>6. Confidence interval for the expected value</li> <li>7. Testing the hypothesis</li> <li>8. Regression line and correlation</li> <li>9. Factor analysis</li> <li>10. Neural Networks</li> <li>11. Displaying the results</li> </ol> <i>Practical education</i> <ol style="list-style-type: none"> <li>1. Entering data</li> <li>2. Frequency tables</li> <li>3. Contingency tables</li> <li>4. Measures of centeredness and distribution</li> <li>5. Confidence interval for the expected value</li> <li>6. Testing the hypothesis</li> <li>7. Regression line and correlation</li> <li>8. Factor analysis</li> <li>9. Neural Networks</li> <li>10. Different ways of displaying data</li> </ol>			
<b>Literature</b> <i>Compulsory</i> 1. Chemometrics: Statistics and Computer Application in Analytical Chemistry, 2nd Edition, Matthias Otto, Willey, 2007.			
<b>Number of active classes</b>		<b>Theory:</b> 30	<b>Practice:</b> 15
<b>Teaching methods:</b> lectures, practice			
<b>Student activity assessment</b> (maximally 100 points)			
<b>Pre-exam activities</b>	<b>points</b>	<b>Final exam</b>	<b>points</b>
Lectures	10	Written	70
Practices		Oral	
Colloquium		.....	
Essay	20		