

Study program: Integrated academic studies of Pharmacy			
Type and level of the study program: integrated academic studies			
Course title: SOFTWARE DATA PROCESSING (PhIII-SOFDP)			
Teacher (name, middle initial, surname): Mihalj M. Poša, Ana S. Pilipović, Vesna B. Tepavčević			
Course status: elective			
ECTS Credits: 3			
Condition: Mathematics; Statistics			
Course aim 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.			
Expected outcome of the course: Basic elements of statistics Processing of experimental data using software packages			
Course description <i>Theoretical education</i> 1. Introduction: The use of computers in statistics 2. Preparation and organization of data 3. Entering data, 4. Table of frequencies, contingency tables 5. Measures of centeredness and distribution 6. Confidence interval for the expected value 7. Testing the hypothesis 8. Regression line and correlation 9. Factor analysis 10. Neural Networks 11. Displaying the results <i>Practical education: exercises, other forms of education, research related activities</i> 1. Entering data 2. Frequency tables 3. Contingency tables 4. Measures of centeredness and distribution 5. Confidence interval for the expected value 6. Testing the hypothesis 7. Regression line and correlation 8. Factor analysis 9. Neural Networks 10. Different ways of displaying data			
Literature <i>Compulsory</i> 1. Chemometrics: Statistics and Computer Application in Analytical Chemistry, 2nd Edition, Matthias Otto, Willey, 2007.			
Number of active classes			Other:
Lectures: 30	Practice: 15	Other types of teaching:	
Research related activities:			
Teaching methods: lectures, practice			
Student activity assessment (maximally 100 points)			
Pre-exam activities	points	Final exam	points
Lectures		Written	50
Practices	10	Oral	
Colloquium	40	
Essay			