

Level: bachelor				
Course title: Statistical Analysis in Chemistry (IHA-202)				
Status: elective				
ECTS: 6				
Requirements: none				
Learning objectives Theoretical and practical training of students for the proper presentation of experimental results, in order to obtain useful information, better management and make the right conclusions and interpretation of measurement results.				
Learning outcomes Upon successful completion of this course, students should know: • The causes of uncertainty of analytical measurements and the accuracy and precision of the results; • To properly group and present the results in tables and/or graphs; • To compare the results of analytical measurements using statistical methods; • To establish the existence of a correlation between the results, and • To use computers for statistical analysis and graphical presentation of results.				
Syllabus <i>Theoretical instruction</i> Development and importance of statistical analysis of the results of analytical measurements. Grouping and graphical presentation of results. Probability. Binomial and normal distributions. Measures of central tendency and variability. Confidence interval. Statistical tests: <i>t</i> -test, <i>F</i> -test, <i>Q</i> -test and <i>G</i> -test. Analysis of variance. Regression and correlation and their application. Curvilinear regression and multivariate regression. <i>Practical instruction</i> Practical instruction follows the theoretical instruction.				
Weekly teaching load				Other:
Lectures: 2	Exercises: 2	Other forms of teaching:	Student research:	