

<b>Level:</b> Specialist academic studies of chemistry				
<b>Course title:</b> Chemometrics (advanced course) (DSH-612)				
<b>Status:</b> Elective				
<b>ECTS:</b> 15				
<b>Requirements:</b> None				
<b>Learning objectives</b> To provide broad and balanced knowledge from chemometrics. Introducing students to apply mathematical and statistical methods for the collection of high-quality experimental data and for their processing.				
<b>Learning outcomes</b> Mastered necessary knowledge that will enable the student to provide reliable data and their proper treatment in order to obtain reliable information.				
<b>Syllabus</b> <i>Theoretical instructions</i> Statistics of repeated measurements. Significance tests. The quality of analytical measurements. Calibrations methods. Sampling theory. Experimental design and optimization. Signal processing. Multivariate analysis. Artificial intelligence. Expert systems.  <i>Other forms of teaching</i> Project preparation.				
<b>Weekly teaching load</b>				Other: /
Lectures: 5	Exercises: /	Other forms of teaching: /	Student research: 5	