

Course title: Instrumental analysis						
	Specialty	Semester	Number of ECTS	Number of hours in the class	Form	
	Foreign students	winter	3	30	Lab class	
Name of lecturer: Dr. Grzegorz Romanowski						
Objective of the course (expected learning outcomes and competences to be acquired)						
Upon successful completion of this course, a student should be able to:						
<ul style="list-style-type: none"> • apply the principles and theories of electro-analytical, spectroscopic and chromatographic methods to conduct analytical processes • carry out by himself instrumental analyses and interpret their results • apply statistical tests to experimental data • solve problems met during chemical analysis experiments 						
Prerequisites:						
<ul style="list-style-type: none"> - completed Analytical Chemistry course - competences in quantitative and qualitative analytical chemistry 						
Teaching methods:						
<ul style="list-style-type: none"> • Laboratory experiments 						
Course contents						
Basics of laboratory apparatus, qualitative and quantitative analysis related to spectroscopic (UV-Vis spectroscopy), chromatographic (gas chromatography) and electroanalytical methods (potentiometry, conductometry, coulometry, polarography, voltammetry and amperometric titration).						
Recommended reading:						
A. Primary literature:						
A.1. Literature used during classes:						
Monographic works provided by assistants leading classes						
B. Supplementary literature:						
Various academic handbooks concerning instrumental analysis						
Assessment methods:						
<ul style="list-style-type: none"> • project – execution of experiments and presentation of their results • mid-term tests • end-term test 						
Language of instruction: English						