Level: Specialist studies in Chemistry

Course title: Practical Aspects of Instrumental Analysis

Status: elective

ECTS: 5

Requirements: none

Learning objectives

Getting knowledge about the specific instrumental analytical methods selected by students.

Learning outcomes

Obtaining the necessary theoretical and practical knowledge in the chosen field of instrumental analysis.

Syllabus

Theoretical instruction.

To learn more about the practical aspects of instrumental analysis by solving selected analytical problems. Specifics of taking and preparing samples for analysis. Selected methods of instrumental analysis (methods of separation, spectroscopic methods, electroanalytical methods, etc.). Specificity of analysis of different samples (e.g. water, air, soil, raw materials and products, foodstuffs, biological materials, etc.).

Practical instruction

Practical classes will be organized in blocks. During the course each student will select a topic from at least three areas of instrumental analysis for experimental work and micro-project. During the lectures the appropriate literature about the target analytical problem will be selected, and the detailed plan of the experimental work will be prepared. The time foreseen for experimental work is one month per subject. The results will be reported in the form of project reports.

Weekly teaching load				Other:
Lectures: 2	Exercises: /	Other forms of	Student research:	
		teaching: 2		