Level: Specialist academic studies of chemistry

Course title: Kinetic Methods of Chemical Analysis

Status: elective

ECTS: 15
Requirements: none

## Learning objectives

The student directed to analytical chemistry research will be acquainted with the actual principles and application of kinetic methods to chemical analysis.

## **Learning outcomes**

Students should be able to theoretically and practically determine the concentration of an analyte in various (complex) materials using kinetic methods.

## **Syllabus**

Theoretical instruction

Kinetic aspects of analytical application of chemical reactions. Kinetics of chemical reactions. Indicator reactions in chemical analysis (non-catalytic and catalytic reactions, homogeneous and heterogeneous reactions). Methods of measurement of indicator component concentration. Analysis of kinetic data. Analytical application of non-catalytic and catalytic reactions. Sensitivity, selectivity, and detection limit of catalytic methods of analysis.

Practical instruction or written essay on a subject by choice.

Weekly teaching load				Other:
Lectures: 5	Exercises:	Other forms of teaching:	Student research: 5	