

Level: bachelor				
Course title: Inorganic Chemistry I				
Status: obligatory for Chemist, Biochemist and Chemist, Environmental Quality Control and Management and elective for Analyst of the Environmental Protection				
ECTS: 8				
Requirements: none				
Learning objectives Acquisition of basic knowledge about synthesis, characteristics and application of elements and their inorganic compounds in contemporary environment.				
Learning outcomes After completing this course the student is able to: 1. demonstrate basic knowledge about prevalence and physico-chemical properties of selected chemical elements and their compounds; 2. demonstrate basic knowledge about laboratory and industrial processes for obtaining selected chemical elements and their compounds; 3. demonstrate basic knowledge about the application of selected chemical elements and their compounds, to perform experiments independently and formulate conclusions about chemical behaviour of elements and their inorganic compounds based on experimental results.				
Syllabus <i>Theoretical instruction</i> Introduction to the chemistry of the elements. Chemical and physico-chemical properties of metals, non-metals and semimetals. Basic classes of inorganic compounds and nomenclature. Types of reactions in inorganic chemistry. Occurrence, extraction, physical and chemical properties and application of s-, p-, d- and f-elements and their compounds. <i>Practical instruction</i> Reactions of selected s-, p- and d-elements and their compounds.				
Weekly teaching load				Other:
Lectures: 3	Exercises: 2	Other forms of teaching: 3	Student research:	