

Level: Bachelor				
Course title: Environmental chemistry				
Status: obligatory				
ECTS: 7				
Requirements: none				
Learning objectives To provide students with systematic knowledge of the most important areas of physical chemistry necessary for understanding the physical and chemical processes in the environment.				
Learning outcomes General knowledge and understanding of the state of the matter, energy changes in physical and chemical processes, chemical and physical equilibrium, the processes at interfaces, chemical kinetics and photochemistry.				
Syllabus <i>Theoretical instruction</i> Liquid state. Surface tension and viscosity. Gaseous state. Ideal and real gas state. The laws of thermodynamics, thermochemistry, chemical potential. Chemical equilibrium. Thermodynamic principles of multi-component equilibria. Ideal and dilute solutions. Real solutions. Processes at interfaces. Air-water interface. Soil-water interface. Soil-air interface. Chemical kinetics. Fundamentals of colloidal chemistry. Photochemical processes. <i>Practical instruction</i> Computational tasks from the major topics in the curriculum.				
Weekly teaching load				Other: -
Lectures: 3 (45)	Exercises: 3 (45)	Other forms of teaching: -	Student research: -	