

Level: bachelor				
Course title: Ecotoxicology				
Status: obligatory for OKK /elective for OZZS				
ECTS: 9				
Requirements: none				
Learning objectives Introducing students to the mechanism of toxic effects of pollutants on individual organisms and ecosystems. Introduction to methods for quantification of toxic pollutants, their effects and predicting environmental effects, as well as the basics of assessment and risk management.				
Learning outcomes Obtaining the basic knowledge of toxicants in the environment, their distribution and transport. Understanding the conditions under which toxic effects express, the basic mechanisms of toxicity and effect, quantitation of toxicity and risk management basis.				
Syllabus <i>Theoretical instruction</i> Definition of basic concepts in ecotoxicology, primary sources, types and characteristics of toxicants. Study of the physical and chemical transformation of toxicants in the environment and their distribution and transportation. Studying the effects of toxicants on individual organisms through defining factors that determine the toxicity and persistence of biotransformation: toxicokinetics and toxicodynamics, carcinogenesis, teratogenesis and mutagenesis. Studying the effects of toxicants on population, community and ecosystem. Introduction to the quantitation of toxicity. The study of specific toxic effects of selected inorganic and organic pollutants and biotoxins. Introduction to the problems and methods for predicting ecological effects, risk assessment and regulatory aspects of ecotoxicology. <i>Practical instruction</i> Practical course follows the theoretical one.				
Weekly teaching load				Other:
Lectures: 3(45)	Exercises: 2(30)	Other forms of teaching: 1 (15)	Student research:	