

Level: PhD				
Course title: Ecotoxicology (Advanced Course) (DZZS-703)				
Status: Elective				
ECTS: 15				
Requirements: None				
Learning objectives Acquiring advanced knowledge of chemical properties, mechanisms and consequences of toxic effects of pollutants on organisms and ecosystems, including methods for monitoring and predicting environmental effects, in order to assess and manage risk.				
Learning outcomes After completing the course, students will be able to independently apply knowledge: toxic components in the environment, their chemical properties, ecotoxic behaviour in nature, consequences, and risk management.				
Syllabus <i>Theoretical instruction:</i> In order to learn about the interaction of pollutants in natural systems, as well as upgrade their knowledge in this field already gained in the course of their studies, students will study then chemodynamics of pollutants, environmental toxicology, ecology and ecotoxicology of pollution. The study of the toxicity of selected inorganic and organic pollutants: toxicokinetics and toxicodynamics, carcinogenesis, teratogenesis and mutagenesis. Quantification and assessment of ecotoxicological effects at the level of the organism, population and community effects on habitat. Prediction of ecological effects, risk assessment, regulatory aspects of ecotoxicology and statistical evaluation of data on the quality of the environment in terms of ecotoxicology. <i>Practical instruction:</i> Searching of ECOTOX database to find data on the toxicity of the selected set of hazardous substances, the interpretation of results and extrapolation to the ecosystem level. Development of projects on a selected topic from the curriculum.				
Weekly teaching load				Other:
Lectures: 5	Exercises:	Other forms of teaching:	Student research: 5	