Level: Specialist studies

Course title: Chemistry and ecotoxicology of pollution (advanced course)

Status: elective

ECTS: 5

Requirements: none

Learning objectives

Deepening students' knowledge acquired at the undergraduate level in the field of ecotoxicology of chemicals and ecotoxicological properties due to the presence of pollutants in the entire ecosystem and its biological components (biota).

Learning outcomes

Obtain specialized knowledge about the chemical properties of toxic components in conjunction with their ecotoxicity, which enable better understanding of the fate of pollutants in the environment.

Syllabus

Theoretical instruction

The interaction of pollutants in natural systems, with special emphasis on the hemodynamics of pollutants, environmental toxicology, ecology and ecotoxicology of pollution. Ecotoxicology and chemical behaviour of certain groups of pollutants (deoxygenizing substances, nutrients, pesticides, oil and hydrocarbons, polychlorinated biphenyls and other synthetic organic compounds, metals, and salts, atmospheric pollutants, thermal pollution substances, radionuclides and suspended solids and sludge). Ecotoxicity assessment of certain groups of pollutants and the use of the information obtained in the context of integrated environmental management.

Practical instruction

Practical course follows the theoretical one.

Weekly teaching load				Other:
Lectures: 2(30)	Exercises: 2(30)	Other forms of teaching:	Student research:	