

<b>Level:</b> PhD				
<b>Course title:</b> Genotoxicity of pollutants (DSB710)				
<b>Status:</b> elective				
<b>ECTS:</b> 15				
<b>Requirements:</b>				
<b>Learning objectives</b> Learning the mechanisms of genotoxicity of environmental pollutants. Training the students for scientific research in the field of genotoxicity of pollutants.				
<b>Learning outcomes</b> Understanding the mechanisms of genotoxicity of pollutants in the environment. Ability to search, apply and present scientific information and knowledge in genotoxicity of pollutants.				
<b>Syllabus</b> <i>Theoretical instruction</i> Classification of pollutants in environment. Nature and chemistry of selected groups of pollutants. Types and causes of DNA damage at the level of genes and chromosomes. Interaction of pollutants and their metabolites with DNA and mechanisms of DNA damage by particular pollutants. Heavy metals as genotoxic agents. Biomarkers of genotoxicity and DNA damage. Methodology of pollutant genotoxicity testing. Defence mechanism against genotoxicity of pollutants.  <i>Practical instruction</i>				
<b>Weekly teaching load</b>				Other:
Lectures:	Exercises:	Other forms of teaching:	Student research:	