

Study Programme : PhD in Ecology			
Degree level: Doctoral degree			
Course Title: Ecotoxicology 2			
Professor: Ivana Teodorovic			
Elective Course			
Number of ECTS: 15			
Prerequisites: -			
Course Objective: Providing comprehensive overview of the persistent organic pollutants (POPs), new emerging pollutants and endocrine disrupting chemicals (EDCs), their environmental fate and mode-of-action on individual, population and ecosystem level. Students get the solid knowledge on methods for monitoring and identification of key toxic pollutants causing stress in aquatic ecosystems, risk assessments and mitigation of aquatic ecosystems' ecological status decline as a consequence of toxic stress.			
Course Outcome: Successful students will gain solid knowledge on toxicokinetics of the persistent organic pollutants (POPs), new emerging pollutants and endocrine disrupting chemicals (EDCs) and will be skilled to independently conduct toxicity test on selected battery of standardized aquatic laboratory species, to process and analyse results using software packages and interpret data, in compliance with the current national and EU environmental regulations in the field of chemical and ecological risk assessment.			
Course Content: <i>Theoretical part</i> Comprehensive overview of the persistent organic pollutants (POPs) with special emphasis on pesticides, PCBs, PCDDs, PCDFs, PAHs, new emerging pollutants and endocrine disrupting chemicals (EDCs), their environmental fate and mode-of-action on individual (including humans), population and ecosystem level. Students get the solid knowledge on methods for monitoring and identification of key toxic pollutants causing stress in aquatic ecosystems, risk assessments and mitigation of aquatic ecosystems' ecological status decline as a consequence of toxic stress. International conventions, EU and national regulation of POPs. <i>Practical part:</i> Laboratory toxicity tests. QUASAR.			
Reading List: Basic reading list: 1. Hoffman, D. J., Rattner, B. A., Burton, G. A. Jr. and Cairns, J. Jr. (eds.). (2002). Handbook of Ecotoxicology. CRC Press, Lewis Publishers, Boca Raton, Florida, USA. 2. Stuart Harrad (ed.). (2001). Persistent Organic Pollutants: Environmental Behaviour and Pathways of Human Exposure. Kluwer Academic Publishers. 3. H. Fiedler (ed.). (2003). Persistent Organic Pollutants. Springer Verlag. Further reading: scientific papers, internet sources			
Total hours:			
Lectures: 5	Practicals:	Other:	Student research work:5
Methods of instruction: Lectures/consultations, literature research, independent laboratory research			
Assessment (maximum number of points 100)			
Requirements			
Essay: 50 points, Oral exam 50 points			
Remark:			