

University: University of Presov in Presov					
Faculty: Faculty of Humanities and Natural Sciences					
Subject code: 2BIO/EROSJEKOX/22			Subject name: Ecotoxicology		
Method of educational activities: lecture					
Number of ects: 4					
Semester: winter					
Degree of study: master					
Evaluation: Semester work (40 %) Exam (60 %)					
Aims and Objectives: The student, graduate of the course can creatively use knowledge and basic and applied knowledge in the field of environmental toxicology, the effects of environmental pollutants, biodegradation and the effects of xenobiotics on organisms, including humans. The graduate knows how to use knowledge creatively and masters their application. The graduate has developed competencies for further self-education, is able to use the acquired theoretical knowledge and practical skills in solving problems in the field of ecotoxicology.					
Education outcomes: To obtain basic and applied knowledge and results from the field of environmental toxicology, effects of pollutants in environment, effects of xenobiotics in the organism.					
Syllabus: Ecotoxicology – definition, introduction to the issue. Natural toxicants and poisons. Man, as a factor of environmental pollution. Division of sources of environmental pollution. Toxicity, poison, types of toxic effects. Dose – response relationship. Interactions of chemical substances, terminal, self-replicating toxicity. Identification of harmful substances, distribution and elimination of pollutants. Mutagenic, teratogenic and carcinogenic effects of extraneous matter, poisons and their classification. Toxic effect of elements of major subgroups and their compounds on the organism. Toxic effect of elements of subgroups and their compounds on the organism. Toxic effect of selected types of organic compounds. Pesticides. Radioactive substances and radiation, radiotoxicity, radioactivity. Preventive toxicology, chemicals in work and environment, hygiene regulations. Hygiene and work safety, manner of protecting against harmful substances.					
Literature: CALOW, P. 1993. Handbook of Ecotoxicology. Vol. I., Vol. II, Oxford: Blackwell Scientific Publications. 478pp. ISBN 0-632-03573-0, 416 pp. ISBN 0-632-02989-7. SEDLÁK, V.; PORÁČOVÁ, J. 2015. Environmentálna toxikológia. Prešov: Prešovská univerzita v Prešove, FHPV, 162 s. ISBN: 978-80-555-1484-0.					
Language: english					
Evaluation of subject:					
A	B	C	D	E	FX
Teacher: Assoc. Prof. RNDr. Vincent Sedlák, PhD.					
Date of last change: 22.04.2024					