



COURSE DATASHEET

Semester:	2014/15/2
Course:	Toxicology-ecotoxicology
Code:	VEMKZOB212T
Responsible department:	Department of Limnology
Department code:	MKLI
Responsible instructor:	dr. Nóra Kováts

Course objectives:

Overview on the mode of action of most important polluting agents, on basic principles and concept of toxicokinetics and toxicodynamics. An understanding of basic ecotoxic tests, and statistical evaluation of the results. Students should be able to carry out toxicity testing and to interpret the results properly.

Course content:

? Fate and mode of effect of most important polluting agents ? Toxicokinetics and toxicodynamics: concepts ? Food chain, accumulation of toxic components ? Exposure ? Uncertainty factors (quality assurance problems, extrapolation of data) ? End-points of the tests (EC_x values, NOEC, NOAEL, etc.) ? Statistical evaluation of the tests (probit analysis, ANOVA, etc.) ? Algorithm of the Ecological Risk Assessment (ERA) ? Short overview on national and European Union-level regulation ? Case studies

Requirements, evaluation and grading:

Written examination during the end-of-semester test period.

Required and recommended readings:

Kiss I.: Toxikológia Vp. Egyetemi Kiadó Moriarty F.: Ecotoxicology. Acad Press Harcourt Brace Jovanovich Publ.1983. OECD Guideline for Testing of chemicals. Szabvány gyűjtemény. 1984. Párizs. WHO International Agency for Research on Cancer: Statistical Methods in Cancer Research vol 3. 1986. Várnagy L.: Növényvédőszer toxikológia. PATE, Keszthely, Egyetemi jegyzet. Casaret and Douls: Toxicology, 1986. Ernest H.-Frank E. G.: Biochemical Toxicology. Elsevier New York, 1980.