Study Programme : MSc in Ecology

Degree level: Master degree

Course Title: Ecological Monitoring

Professor: Ivana Teodorovic

Elective Course

Number of ECTS: 6

Prerequisites: -

Course Objective: Afirmation of multidisciplinary integrative approach in environmental and ecological monitoring, with special emphasis on biomonitoring.

Course Outcome: Provides overview of current trends and concepts of integrated environmental quality assessment programmes, ecological status assessment and trend analysis.

Course Content:

Theoretical part Multidisciplinary approach in environmental and ecological monitoring (goals, planning, selection of appropriate battery of methods and parameters, reference conditions, sampling, representative sample, temporal and spatial dynamics in sampling, field measurements and observations, laboratory analysis, bioindicators). Ecological status assessment of various types of waterbodies as stipulated by WFD: hydromorphological, physico-chemical, priority pollutants, biological quality elements. Air quality monitoring: emission, ambient air monitoring, biomonitoring, national and EU regulations. Soil quality monitoring: physico-chemical and biological methods, soil erosion and fertility, national and EU regulations.

Practical part Hydromorphological quality elements in different types of water bodies. Physico-chemical quality elements and priority pollutants. Biomonitoring – biological quality elements. Ecological status assessment. Application of ecotoxicological methods in biomonitoring. Methods in air quality assessment: emission and ambient air quality parameters, Methods for soil quality assessment.

Reading List:

Teodorovic, I. Reader. CD

Radulovic S. and Teodorovic I. Eklogija i monitoring kopnenih voda. Metodoloski prirucnik. PMF, Novi Sad, 2011.

Total hours:				
Lectures: 2	Practicals: 2	Other:	Student research work:	

Methods of instruction:

Lectures, laboratory demonstrations and exercises (including visits to external specialized environmental monitoring laboratories)

Assessment (maximum number of points 100)

Requirements	**points**	**Final exam**	**points**
Active participation in lectures	5	Written exam	50
Active participation in practicals	5	Oral exam	
Test(s) or			
Pre-exam testing	*40*		

Remark: