

Degree level: Master degree				
<b>Course Title: Ecological Monitoring</b>				
<b>Course status: Elective</b>				
<b>ECTS: 6</b>				
<b>Prerequisites: none</b>				
<b>Learning objectives:</b> Affirmation of multidisciplinary integrative approach in environmental and ecological monitoring, with special emphasis on biomonitoring.				
<b>Learning outcomes:</b> Providing students with an overview of current trends and concepts of integrated environmental quality assessment programmes, ecological status assessment and trend analysis.				
<b>Course Content:</b> <i>Theoretical part</i> 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.  <i>Practical part</i> 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.				
<b>Total hours:</b>				
Lectures: 2	Practicals: 2	Other:	Student research work:	