

<b>Level:</b> master				
<b>Course title:</b> Applied soil science				
<b>Status:</b> elective				
<b>ECTS:</b> 6				
<b>Requirements:</b> none				
<b>Learning objectives</b> The aim of this course is to understand the principles of soil functioning based on the relationships between factors, processes and properties of soils. Basic concepts of land and soil management, soil erosion processes and mechanisms, water and wind erosion, erosion prevention and control measures.				
<b>Learning outcomes</b> After successfully completing the course the students will be able to: Integrate the basic disciplines to analyze and diagnose soil processes and the functioning of soils, to better understand the impact of man on them; To integrate the principles of soil functioning to understand the soil in the landscape and ecosystem.				
<b>Syllabus</b> <i>Theoretical instruction</i> Soil forming processes and current pedological processes: diagnosis of the current processes, soil evolution, geography of major soil types: recognition of land in the international WRB system, study the functioning of major soil types in their natural ecosystems and in ecosystems modified by man. Soil management and conservation, soil remediation technologies, soil bioengineering, treatment technologies for contaminated soil.  <i>Practical instruction</i> Field visit (soil profile; sampling and processing), mapping of different soil types.				
<b>Weekly teaching load</b>				Other:
Lectures: 2	Exercises: 2	Other forms of teaching:	Student research:	