

**Table 5.2** Course specification

Type and level of studies: Bachelor Academic Studies, 1 <sup>st</sup> level			
<b>Course name: Soil Protection</b>			
Course status: Compulsory			
Number of ECTS credits: 8			
Requirement: None			
<b>Course aim</b>			
Introduction to the basic characteristics of soil. Mastering the basics of soil quality control, conservation measures and soil remediation techniques.			
<b>Course outcome</b>			
Students should be able to define and specify the ecological problems and consequences of soil pollution, apply the basic quality control measures and methods for soil protection; analyze the basic physical and chemical properties of soil; analyze pollutants in soil.			
<b>Course content</b>			
<i>Theory</i>			
Soil as part of the environment, the definition and basic characteristics. Soil pollution. Soil classification. Morphological, physical, chemical and biological properties. Impact of agricultural production (fertilizers, pesticides and heavy metals). Soil sampling and analysis. Methods of soil remediation, in situ and ex situ remediation, bioremediation, physic-chemical remediation. Characterization of contaminated sites.			
<i>Practice: Practical classes, OFT, SRW</i>			
Soil morphological properties. Chemical soil characteristics (pH, carbonate content, salinity, humus content, total organic carbon content). Soil colloids surface reactions. Physical soil characteristics (particle size distribution, soil density and porosity, water holding capacity, soil capillary rise). Soil samplingCalculations. Chemical soil characteristics. Physical soil characteristics. Soil reactions. Soil sampling.			
<b>Literature</b>			
1. Teaching material, PMF Novi Sad, PMF moodle			
2. N. Miljković: Fundamentals of Pedology, Faculty of Science, Novi Sad, 1996.			
3. M. Jakovljević i M. Pantovic: Soil Chemistry and Water, Scientific Book, Belgrade, 1991			
4. D. Veselinović, I. Grzetic, Š. Đarmati, D. Markovic: Environmental Conditions and Processes, Faculty of Physical Chemistry, Belgrade, 1995, pp.106-125.			
5. P. Sekulić, R. Касторн, B. Hadžić: Soil Protection from Degradation, Scientific Institute of Field and Vegetable Crops, Novi Sad, 2003.			
6. G. Schwedt: An Essential Guide to Environmental Chemistry, Part 4 Soil, John Wiley and Sons, LTD, Chichester-New York-Weinheim-Brisbane-Singapore-Toronto (translation), 2001.			
7. V. Hadžić, M. Belic, Lj. Nešić: Practicum in Pedology, Faculty of Agriculture, Novi Sad, 2004.R.E.			
8. White: Principles and practice of soil science, fourth edition, Blackwell Publishing, 2006.			
<b>Number of classes of active teaching</b>			Other classes
Lectures: 3(45)	Practice: 3(45)	OFT:	
SRW:			
<b>Teaching methods</b> Lectures, practice, seminars, consultation			
<b>Assessment of knowledge (maximum of 100 points)</b>			
<b>Pre-exam obligations</b>	<b>Points</b>	<b>Final exam</b>	<b>points</b>
activity during lecture classes	5	written exam	40
practical teaching	15	oral exam	15
colloquia	20	/	
seminars	5	/	