

Course Unit Descriptor

Study Programme: Soil Science and Plant Nutrition			
Course Unit Title: Soil genesis and classification			
Course Unit Code: 3MZII001			
Name of Lecturer(s): assistant professor Vladimir Ćirić,			
Type and Level of Studies: Master Academic Degree			
Course Status (compulsory/elective): Elective			
Semester (winter/summer): winter			
Language of instruction: English			
Mode of course unit delivery (face-to-face/distance learning): Face-to-face			
Number of ECTS Allocated: 6			
Prerequisites:			
Course Aims: To acquire the knowledge of the student about the origin, evolution, properties, causes of variability, laws of geographical distribution and classification of soil into classifications.			
Learning Outcomes: The education and training of students for professional and scientific work in the field soil classification.			
Syllabus: Theory: Definition and basic characteristics of the soil. Pedogenetic factors. General and specific pedogenetic processes. Soil formation (genesis and evolution of the soil). Morphological properties of the soil. Soil classification. Classification systems and principles of the Soil classification of Yugoslavia. Automorphic soils, Hydromorphic soils, Halomorphic soils, Subaqual soil, Soil geography, cartography and soil evaluation. World Classifications of Soils: ST - Soil Taxonomy, WRB - World Reference Base for Soil Resources, ISRIC and ISSS 1998. Russian Soil Classification System. Practice: Soil Survey: Collection of soil samples in a disturbed and undisturbed state. Laboratory analysis soils: determination of salinity and alkali parameters, analysis of properties of soil adsorptive complexes, calculation of required quantities of chemical meliorations of acidic and alkaline soils, determination of water constants, total and differential porosity.			
Required Reading: 1. A.Škorić, G.Filipovski, M.Ćirić : Klasifikacija zemljišta Jugoslavije. Akademija nauka i umjetnosti Bosne i Hercegovine. Sarajevo 1985. 2. World reference base for soil resources – A framework for international classification, correlation and comunication. Food and Agriculture Organiation of the United Nations, Rome, 2015. World soil resources reports 106. 3. Guidelines for soil description. Forth edition. Food and Agriculture Organiation of the United Nations, Rome, 2006. 4. Soil atlas of Europe - European soils bureau network, European Commission, 2005, 128 pp, Office for Official Publications of the European Communities, L-2995 Luxembourg 5. Goran J. Dugalić, Boško A. Gajić: Pedologija , Univerzitet u Kragujevcu, Agronomski fakultet, Čačak, 2012. 6. Milivoj Belić, Ljiljana Nešić, Vladimir Ćirić: Praktikum iz pedologije, Poljoprivredni fakultet Novi Sad, 2014			
Weekly Contact Hours:		Lectures: 30	
		Practical work: 30	
Teaching Methods:			
Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations	points	Final exam	points
Active class participation	5	written exam	30
Practical work	5	oral exam	30
Preliminary exam(s)	/	
Seminar(s)	30		
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.			