

Study program: Bachelor academic studies: ECOLOGICAL ECONOMICS (BASEEC)			
Type and level of studies: Bachelor academic studies, I level			
Subject name: Soil Resource Management		Subject code	6E1URZ
Professor: dr. Snežana Janković , associate professor			
Subject status: Mandatory			
Number of ECTS: 6			
Condition: none			
Subject goal Introduction of students with the genesis, composition, morphology, physical, chemical and biological properties of the soil, the method of determining the fertility of agricultural soils and plant production systems in order to increase its high productivity.			
Subject outcome Acquired knowledge on the management of land resources, as the most important factor of crop production, will allow the student to determine the most rational land use by growing plants without impairment of its productive properties.			
Subject content <i>Theoretical classes</i> Definition of soil and introduction to biotic and abiotic factors that affect its genesis. The impact of agricultural and forestry production on soil properties. The concept of managing this natural resource in order to maintain and enhance the productive capacity of the land. Getting to know the risks of using land in a traditional and modern conventional plant production. Code of good agricultural practice. System of organic (ecological) plant production and their effect on the soil properties. Farming methods adapted to the characteristics of the soil. Methods of improving the physical properties and increasing natural fertility of the soil. Methods of assessment of costs in the management of land resources. Monitoring and control of the proposed methods and the development of mathematical models that could be applied in modern crop production. Defining the most favorable method of growing plants. <i>Practical classes:</i> Introduction to morphological, physical, chemical and biological properties of the soil. Experimental determination of physical soil properties (particle size distribution, classification, the specific mass / density, total porosity, the capillary rise of water in the soil, the permeability of soil to water). Experimental determination of the chemical properties of soil (pH, the content of carbonate, the content of humus in the soil). Description of the method of growing plants and their impact on the soil.			
Literature 1. Živković M. и A.Djordjević (2003): Pedagogija, prva knjiga. Poljoprivredni fakultet, Beograd; 2. Munćan, P. и D. Živković (2004): Menadžment rada I proizvodnje u poljoprivredi. Poljoprivredni fakultet, Beograd. 3. Glamočlija, Dj., S. Janković, V. Popović, V. Filipović, V. Ugrenović и J. Kuzevski (2015): Alternativne ratarske biljke u konvencionalnom i organskom sistemu gajenja, IPN, Beograd; 4. Djurić, N., B. Kresović и Dj. Glamočlija (2015): Sistemi konvencionalne i organske proizvodnje ratarskih useva, Institut PKB Agronomik, Beograd; 5. Janković, S., Dj. Glamočlija и S. Prodanović (2016): Energetski usevi. IPN, Beograd (u štampi).			
Number of active teaching classes			Other classes
Lectures:2(30)	Practices:	Other class forms:2(30)	
Teaching methods Lectures, audiovisual practices, colloquium, defense of written papers, consultations, oral and written exam.			
Knowledge evaluation (maximum number of points is 100)			
Pre-exam obligations	points	Final exam	points
Activity during classes	10	Written exam	30
Practical classes and papers	20	Oral exam	20
colloquium	20		

