

Name of the subject: Soil and Water Conservation			
Teachers (презиме, средње слово име): dr Ratko Ristić , dr Mirjana Todosijević , dr Snežana Belanović Simić			
Status of the subject: elective			
ECTS:5			
Condition:			
Subject objective Introducing students to the processes of soil erosion (water and wind erosion). Study with methods used to analyze the risk of degradation of natural resources (soil and water) as well as significant elements of integral management of the risk of degradation. Introducing to principles and methods for soil and water conservation.			
Outcome of the subject Students are able to define the causes, factors and correlation of the process of soil and water degradation. They know to explain the types and indicators of land degradation and resilience; to define and describe the basic processes and components within individual classification systems, using modern information technologies; to analyze and select methods and models for developing strategies for the sustainable use and protection of soil and water resources.			
Content of the subject Introduction to risk analysis and methods for the assessment of natural disasters in mountainous areas; getting acquainted with the natural disasters that occur in the mountainous area: torrential floods, landslides, rock collapsing, mass movement of sediments, avalanches, forest fires; discussion of natural resource sensitivity and risk assessment; the level of risk tolerance; disaster preparedness and management. Describe the direct and indirect effects of the soil degradation process; describe the system of measures for soil conservation. Practical work: Defining the risk of natural disasters. Determining the degree of risk based on: analysis of erosion processes; soil and geological composition of the terrain; land use; physical-geographical characteristics of space; climatic-meteorological characteristics of the site.			
Proposed literature -Boardman, J.; Poesen, J. (2006): <i>Soil Erosion in Europe</i> . JohnWiley&Sons, England. -Harmon, S.R.; Doe, W.W. (2001): <i>Landscape Erosion and Evolution Modelling</i> . KluwerAcademic/Plenum Publishers, NewYork. -Morgan, R.P.C. (1990): <i>Soil Erosion and Conservation</i> . Longman, Scientific&Technical, with JohnWiley&Sons, NewYork. -Koboltschnig, G. et al., (2012): INTERPRAEVENT (International Research Society)-2012. Proceedings, Vol. 1&Vol. 2 (ISBN: 978-3-901164-19-4), Grenoble, France. Pg. 1-1126. -Chang, M. (2003): <i>Forest hydrology-an introduction to water and forests</i> , CRC Press, NewYork. -Imeson, A. et al., (2006): <i>SCAPE (Soil Conservation and Protection in Europe)-The way ahead</i> (ISBN: 90-75312-06-7), Heiloo, Holland. -Ristić, R.; Kostadinov, S.; Radić, B.; Trivan, G.; Nikić, Z. (2012): <i>Torrential Floods in Serbia – Man Made and Natural Hazards</i> , 12th Congress INTERPRAEVENT 2012, Proceedings (ISBN 978-3-901164-19-4), pg. 771-779, Grenoble, France. -Ristić, R.; Macan, G. (1997): <i>The Impact of erosion control measures on runoff process</i> , Red Book- IAHS Publ. No. 245 (ISBN 1-901502-30-9), pg. 191-194, England. -Ristić, R.; Kašanin-Grubin, M.; Radić, B.; Nikić, Z.; Vasiljević, N. (2012): <i>Land degradation in ski resort “Stara planina”</i> , Environmental Management, (ISSN: 0364-152X, print version; ISSN: 1432-1009, electronic version), No. 49, pg. 580-592 (DOI: 10.1007/s00267-012-9812-y). -Ristić, R.; Kostadinov, S.; Abolmasov, B.; Dragičević, S.; Trivan, G.; Radić, B.; Trifunović, M.; Radosavljević, Z. (2012): <i>Torrential floods and town and country planning in Serbia</i> , Natural Hazards and Earth System Sciences (ISSN: 1561-8633), No. 1, Vol. 12, pg. 23-35 (DOI: 10.5194/nhess-12-23-2012). -Edward Bryant (2005): <i>Natural hazards</i> . CambridgeUniversity Press, NewYork -Patrick L. Abbott (2008): <i>Natural disasters</i> . McGraw-Hill Higher education, sixth edition			
Number of classes of active teaching:		Theoretical teaching:	
Methods of teaching:			
Knowledge rating (maximum points 100)			
Pre-exam obligations:	Points	Final exam:	Points
Activity during lectures	20	Written exam	
Practical teaching		Oral exam	60
colloquium			
Seminar	20		