

Study Programme : MSc in Ecology			
Degree level: Master degree			
Course Title: Conservation and restoration of aquatic ecosystems			
Professor: Ivana Teodorovic			
Elective Course			
Number of ECTS: 8			
Prerequisites: -			
Course Objective: Students will acquire advance knowledge of current concepts, policy and practice in conservation and restoration of aquatic ecosystems, showed on a variety of examples, as well as the best available management practices in sustainable water management.			
Course Outcome: Successful students will be knowledgeable of aquatic ecosystem goods and services concept, skilled to, as a contributing member of interdisciplinary teams, assess ecosystem integrity, evaluate conservation value and level of degradation of aquatic ecosystem, to fully contribute in preparation, designing and conducting of programmes of restoration measures and post-remediation monitoring, in accordance with the current scientifically based concepts, best management practice and requirements of national and EU regulations and international conventions.			
Course Content: <i>Theoretical part</i> Major pressures to aquatic ecosystems. Types of degradation in aquatic ecosystems. Habitat loss as the major driver of aquatic ecosystems' degradation. Classification and evaluation systems used for evaluation of conservation value. Measures and methods for restoration of hydromorphologically altered water bodies. The examples of successfully implemented restoration activities. Conservation, restoration and sustainable use of water resources in national, EU regulations and international conventions. Water management – past, present and future trends – practical solutions contributing to sustainable water management. <i>Practical part</i> Three full day field trips to different types of aquatic ecosystems: protected area, degraded ecosystem and restored (or in the process) ecosystem. Each student (or the group, depending of No of enrolled students) will, guided and advised by the responsible teacher, draft, develop and present the conservation or restoration project.			
Reading List: 1. Black, P.E., Fisher, B. (2000): Conservation of Water and Related Land Resources.; CRC Press 2. Boon, P.J., Davies, B.R., Petts. G.E. (2000): Global Perspectives on River Conservation: Science, Policy and Practice. Wiley. 3. Doll, B.A., Grabow, G.L., Hall, K.R., Halley, J., Harman, W.A., Jennings, G.D., Wise, D.E. (2002): Stream Restoration – A Natural Channal Design Handbook. North Carolina State University and North Carolina A&T State University. 4. FISRWG (2001). Stream Corridor Restoration: Principles, Processes, and Practices. By the Federal Interagency Stream Restoration Working Group (FISRWG)(15 Federal agencies of the US gov't). GPO Item No. 0120-A; SuDocs No. A 57.6/2:EN3/PT.653. 5. Naiman, R.J., Decamps, H., McClain; M.E. (2005): Riparia: Ecology, Conservation, and Management of Streamside Communities; Academic Press.			
Total hours:			
Lectures: 3	Practicals: 2	Other:	Student research work:5
Methods of instruction: Lectures, field trips, students' projects presentations and discussions			
Assessment (maximum number of points 100)			
Requirements	points	Final exam	points
Active participation in lectures		Practical exam	
Active participation in practicals		Oral exam	40
Test(s) or			
Pre-exam testing			
Project preparation and presentation	60		
Remark:			