

<b>Study Programme :</b> MSc in Ecology			
Degree level: Master degree			
<b>Course Title:</b> FRESHWATER MICROBIOLOGY			
<b>Professor:</b> Dragan Radnović			
<b>Required/Elective Course:</b> Elective Course			
<b>Number of ECTS:</b> 6			
<b>Prerequisites:</b>			
<b>Course Objective:</b> The aim of this course is to introduce students with diversity and role of microorganisms in freshwater ecosystems.			
<b>Course Outcome:</b> After successfully completed the pre-examination and examination commitments student should be able to: (i) identify most common group of microorganisms that inhabit fresh water, and (ii) to explain their role in freshwater ecosystems; (iii) to isolate microorganisms in the laboratory and based on laboratory studies assessing the state of the investigated ecosystem.			
<b>Course Content:</b> <i>Theoretical part</i> includes the following topics: Biological diversity of freshwater microbial communities as well as abundance of microbial communities in aquatic ecosystems, the impact of physical chemical conditions on microbial communities, algae as the main microbial biomass in freshwater ecosystems, bacteria as the main heterotrophic microorganisms in fresh water; viruses as the main parasite freshwater environments, aquatic fungi and fungi-like organisms, eutrophication as a microbial response to the high content of nutrients <i>Practical part</i> Taking samples from different freshwater ecosystems, determining the presence and activities of individual groups of microorganisms and evaluation of trophic status of the studied ecosystems			
<b>Reading List:</b> 1. Đukić, A.D., Gajin K.S., Matavulj N.M., Mandić, G.L. (2000): Microbiology of water . Monography. Prosveta, Belgrade (In Serbian). 2. Petrović, O., Gajin, S., Matavulj, M., Radnović, D., Svirčev, Z. (1998): manual for microbiological analysis of water.. Institute of biology, Faculty of Science, University of Novi Sad. (In Serbian). Additional reading: 3. Sigeo, D. (2005): Freshwater Microbiology. John Wiley and Sons Ltd. England ISBN 0471485292.			
<b>Total hours:</b>			
Lectures: 2	Practicals 2	Other:	Student research work: 5
<b>Methods of instruction:</b> Lectures are presented using computer based presentations. Practical laboratory work include isolation, determination of number cultivable microorganisms and some of their biochemical activities.			
<b>Assessment (maximum number of points 100)</b>			
<b>Requirements</b>	<b>points</b>	<b>Final exam</b>	<b>points</b>
Active participation in lectures	5	Practical exam	-
Active participation in practicals		Oral exam	45
Test(s) or	40		
Pre-exam testing			
Seminars	10		
<b>Remark:</b>			