

Study program: Environmental protection			
Type and level of study: Master academic studies			
Course Title: HYDROBIOLOGY			
Teachers: Snežana Štrbac			
Status: Obligatory, I semester			
ECTS: 8			
Prerequisite: None			
The goal of course Mastering the definitions and concepts of hydrobiology, understanding phenomena and processes in aquatic ecosystems, understanding the impact of abiotic and biotic factors on the aquatic organisms.			
The outcome of the subject Students will understand the phenomena and processes in aquatic ecosystems, and be able to interpret the concept of real data into the problems in the field saprobiology and pollution of aquatic ecosystems and solving these problems, mainly related to the protection and rational management of water .			
Syllabus <i>Theoretical study –</i> Introduction. Water as habitat; lakes, rivers, wetlands and other specific systems. The composition of benthic communities in aquatic ecosystems; basic characteristics, divisions and main representatives. Phytoplankton; characteristics of phytoplankton community; spatial and temporal distribution; seasonal successions. Periphyton; characteristics of periphyton communities; colonization of the substrate. Aquatic macrophytes; significance and structure; division; vertical distribution. Zooplankton; population structure of zooplankton; annual and seasonal variations; nutrition, reproduction and life cycle. Zoobentos; migration, colonization and recolonization; food chain, functional groups, life cycles. Fish; distribution, structure and types of populations; nutrition and reproduction. Food chain, circulation of nutrients and energy in the food chain; function of microbial circle; primary and secondary productivity; mutual interaction. <i>Practical classes –</i> Methodology of hydrobiology sampling, laboratory analysis of the collected material, basic elements of the taxonomy and systematics of organisms that are used as indicators of environmental conditions.			
Literature Simić, S., & Simić, V. (2009) Ekologija kopnenih voda (Hidrobiologija I). Univerzitet u Kragujevcu, Prirodno-matematički fakultet i Univerzitet u Beogradu, Biološki fakultet. Grginčević, M., & Pujin, V. (1998) Hidrobiologija, Ekološki pokret grada Novog Sada, Novi Sad. Wetzel, R.G. (2001) Limnology. Academic Press, San Diego, London.			
Number of lectures:			Other Classes
Lectures: 3	Practices: 2	Other forms of teaching: 2	
Teaching methods: Lectures, practical examples and literature review.			
Score (maximum 100 points)			
Pre-commitments	Poens	The final exam	Poens
Activity during lectures	10	Written exam	30
Practical classes	20	Oral examination	
Colloquia	20		
Seminars	20		
<i>Total</i>	70		30