

Study program: Environmental protection			
Type and level of study: Bachelor academic studies			
Course Title: Hydrology			
Teachers: Željka Jeličić Marinković			
Status: Obligatory, semester III			
ECTS: 8			
Prerequisite: None			
The goal of course Learning the definitions and concepts of hydrology and the basic elements of aquatic ecosystems, both on abiotic and biotic components. The goal is to familiarize students with the types of water use, basic water supply systems, water protection, and protection from water.			
The outcome of the subject Students will acquire basic knowledge of hydrology and be able to understand the basic phenomena and processes that govern aquatic ecosystems and water protection for sustainable development.			
Syllabus <i>Theoretical study –</i> Introduction. Physical and chemical properties of water. Water cycle. Water balance. The amount and distribution of water on Earth. Groundwater; occurrence and general features; sources; mineral water; hydrogeothermal energy. Rivers; the occurrence and types of watercourses; river system, river networks, river basin; characteristics of river water; movement of river water; water regime; river sediments; organisms in rivers. Glaciers; erosive and accumulative landforms. Permafrost; permanently frozen soil. Lakes; origin and classification of lakes; physical and chemical properties; movement of lake water; organisms in lakes. Wetlands; occurrence and types; hydrological and thermal regime; the importance of wetlands. Seas and oceans; horizontal distribution; ocean bottom sediments and bottom; physical and chemical properties of sea water; movement of sea water; organisms. Water management; division; uses of water; water quality; water pollution; protection of water resources; protection of water. Protection from water. <i>Practical classes –</i> Exercises with practical examples, learning the basic elements of hydrological research, methods and instruments for the determination of water quality, water flow rate etc. Analysis of the current hydrological problems and their impact on the environment.			
Literature 1. Dukić, D. & Gavrilović, Lj. (2006). Hidrologija. Zavod za udžbenike i nastavna sredstva. Beograd. 2. Gavrilović, Lj. & Dukić, D. (2002). Reke Srbije. Zavod za udžbenike i nastavna sredstva. Beograd. 3. Stanković, S. (2005). Jezera sveta. Zavod za udžbenike i nastavna sredstva. Beograd. 4. <u>Hydrology: An Introduction</u> (2005) <u>Wilfried Brutsaert</u> , ISBN-13: 978-0521824798 ISBN-10: 0521824796			
Number of lectures: 5			Other Classes
Lectures: 3	Practices: 2	Other forms of teaching: Student research work:	
Teaching methods: Lectures, analysis of practical examples and literature.			
Score (maximum 100 points)			
Pre-commitments	Poens	The final exam	Poens
Activity during lectures	10	Written exam	50
Practical classes	20	Oral examination	
Colloquia	20		
Seminars			
<i>Total</i>	50		50