

<b>Study Programme:</b> MSc in Ecology			
<b>Degree level:</b> Master degree			
<b>Course Title:</b> HYDROLOGY			
<b>Professor:</b> Dragoslav Pavić			
<b>Required/Elective Course:</b> Elective Course			
<b>Number of ECTS:</b> 6			
<b>Prerequisites:</b> -			
<b>Course Objective:</b> Establishing basic laws in hydrological processes and phenomena on the Earth and acquiring knowledge related to basic hydrological elements and characteristics of inland body of water and the world's ocean.			
<b>Course Outcome:</b> Acquired knowledge of hydrological concepts and ability to focus on cause-effect issues existing in hydrological processes and phenomena.			
<b>Course Content:</b>			
<i>Theoretical part</i>			
Subject, objectives and classification of Hydrology. Basic hydrological concepts. Underground waters, their origin, conditions, ways of charging and movement. Types and characteristics of aquifer. Physical and chemical characteristics of underground waters. Types and characteristics of water sources. The importance of underground waters and their catchment area. Potamology and basic potamological concepts. River valley and river bed. Basic characteristic of river water and its movement. Water regime, its elements and types. The origin, types, distribution, erosive-accumulative impact and hydrological impact of glaciers. The origins and types of lakes, their water balance and movement of lake water. Basic characteristics of lake water, their distribution and impact. The origin, types and distribution of marshes. The world's sea and sea water characteristics. The movement of sea water and economic significance of the world's sea.			
<i>Practical part</i>			
The condition for the appearance of underground waters. Study methods of the phreatic aquifer regime and measurement of the source yield. Methods for the determination of the borderline and morphometric characteristics of river catchment area. Methods for the determination of morphometric characteristics of water flow. Methods for analysing elements of water regime. Methods for the determination of morphometric characteristics of lakes. SONAR – a device for measuring water depth. Field study.			
<b>Reading List:</b>			
Dukić, D. (1984): Hidrologija kopna. Naučna knjiga, Beograd.			
Dukić D, Gavrilović, Lj. (2005): Hidrologija. Zavod za udžbenike i nastavna sredstva, Beograd.			
Petrović, J., Bogdanović, Ž., Pavić, D. (2004): Hidrologija-Podzemne vode. Prirodno-matematički fakultet, Novi Sad.			
Todd, D.K., Mays, L.W. (2005): Groundwater Hydrology. John Willey and Sons.			
<b>Total hours:</b>			
<b>Lectures:</b> 2	<b>Practicals:</b> 2	<b>Other:</b> -	<b>Student research work:</b> 5
<b>Methods of instruction:</b> Lectures. Interactive classes. Iluustrative and demonstrative method. Field work.			
<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	5	Oral exam	45
Test(s) or	40		
Pre-exam testing	-		
Seminar paper	5		
<b>Remark:</b> -			