

Study Programme: PhD in Geosciences (Geography)			
Level: PhD			
Subject title: Global hydrology influences			
Lecturer(s): dr Dragan Dolinaj, dr Stevan Savić			
Status: elective			
ECTS: 11			
Requirements: None			
Learning objectives Define the main regularities of hydrology processes and phenomena in The Global Ocean. Adoption the main hydrology terms and characteristics of the oceans and seas. The main goal is overview the global impacts of worldwide water areas (oceans and seas) on global climate and on the geography of the Earth in general.			
Learning outcomes Adoption of knowledge about main phenomena in oceans. Acquire competences in causal analysis of issues related with hydrology processes and phenomena in oceans and its impacts on global natural processes.			
Syllabus <i>Theoretical part</i> Global Ocean – division and developmen; Global Ocean – horizontal division; Relief of the Global sea; Salinity – horizontal and vertical division; Optical properties of sea water; Temperature of sea water; Sea ice – spatial distribution, consequences of ice core melting Sea waves – genesis, dimension and impact on coast; Sea currents – genesis, patterns in global sea, impacts on environment; Tide and ebb – impacts on environment; Temperature oscillation of Global sea – influences on air temperature, winds, precipitation patterns, etc. <i>Practical part</i> Creation the patterns of ocean currents; Preparation of the seminar paper			
Recommended literature 1. Steele, H. J., Thorpe, A. S., Turekian, K. K. (2010): Climate and oceans. Academic Press is an imprint of Elsevier, 32 Jamestown Road, London NW1 7BY, UK 2. Robinson, S. I. (2010): Discovering the ocean from space. Springer-Verlag, Berlin. 3. Thurman, V. H., Burton, A. E. (2001): Introductory oceanography. Prentice Hall, Upper Saddle River, New Jersey.			
Weekly teaching load	Lectures: 4(60)		Student research:
Teaching methodology Oral presentations, dialogue method, textual method, illustration and demonstration methods with multimedial presentation			
Grading method (maximal number of points 100)			
Pre-exam obligations	points	Final exam	points
Seminar paper	50	Oral exam	50