

Study programme: Bachelor with honours in Geography			
Course title: Climatology and hydrology geo influences			
Teacher(s): dr Stevan M. Savić, dr Dragan M. Dolinaj			
Status: compulsory			
ECTS: 8			
Requirements: none			
Learning objectives			
The aim of the course is the students are known to climatology and hydrology impacts on the geographical area. Large water masses influences as the global climate modifiers. Climate characteristics changes, affecting the geographical area and alter it. The hydrological characteristics are constantly changing on global level.			
Learning outcomes			
Knowing about the changes that occur in the geographical area affected by climatic and hydrologic factors. The knowledge about changes of hydrologic bodies, their dynamic and direction of change. Knowledge about the extent of climate change and the consequences of these changes on the geographical environment.			
Syllabus			
<i>Theoretical part:</i>			
Climatic factors and their abrupt changes can cause big changes in the geographical area. Large amounts of rainfall in a short period of time can lead to large changes in the environment. Creating a torrent, flooding and landslides can lead to changes in space that manifest themselves in seeing the damage to buildings, infrastructure and even human casualties. The sharp rise in water level and flow in the rivers leading to undermining coast, growth phreatic aquifer in alluvial plains, causing flooding. Sudden changes in climatic factors often have a seasonal character, high temperatures that can occur during the summer affect drought on soil, volumetric reduction of water in the reservoirs, reducing the level of the phreatic aquifer, all of which can lead to changes in the form of arrangement of vegetation, damage to agricultural land, changes in the regime of surface waters. Such events often cause severe damage to agriculture, industry, transport, tourism. Global changes in the distribution of glaciers, coral reefs, the occurrence of forest fires, floods, global sea level changes are modern and global change. Analysis of such events in the past, their frequency and consequences, leading to possible solutions, if not predict, then certainly in anticipating their consequences.			
<i>Practical part:</i>			
Visit anti-hail radar center in Fruska Gora, visit the company “Vojvodina Waters”, a tour along the Danube’ embankment in the area of Novi Sad.			
Literature			
Dolinaj, D., Savić, S. et al. 2013. Suvišne unutrašnje vode. PMF, Departman za geografiju, turizam i hotelijerstvo, Novi Sad: 154 pp.			
Dolinaj, D. et al. 2014. Suša i upravljanje vodama u južnoj Mađarskoj ravnici i Vojvodini. Univerzitet u Segedinu, Segedin: 384 pp.			
Putarić, V. 2003. Hidrologija. Poljoprivredni fakultet, Novi Sad.			
Ochoa, G., Hoffman, J., Tin, T. 2005. Climate: The force that shape our World – and the life on Earth. Rodale International Ltd., London: 288 pp.			
Schneider, T., Sobel, A. 2007. The Global Circulation of the Atmosphere. Princeton University Press: 400 pp.			
Bridgman, H.A., Oliver, J.E. 2006. The Global Climate System – Patterns, Processes and Teleconnections. Cambridge University Press: 350 pp.			
Fagan, B. 2005. The Long Summer: How Climate Changed Civilization. Granta Books: 320 pp.			
Weekly teaching load 6 (90)	Lectures 4	Exercises 2	
Methods of Teaching			
Frontal teaching through multimedia presentations, interview methods, field methods.			
Grading method (maximu 100 points)			
Pre-examination assignments	points	Final examination	points
Activities during lectures	0-5	Written examination	
Activities during exercises	0-5	Oral examination	30-45
Colloquia	20-40	
Seminar paper	0-5		