Study programme: Bachelor with honours in Geography Teaching, Bachelor with honours in Geography

Coursle title: Hydrology G205

Teacher(s): dr Dragoslav Pavić

Status: compulsory

ECTS: 7

Requirements: none

Learning objectives

Acquisition of knowledge related to hydrological terms, features of water, fresh waters and world seas, and comprehension of the main laws related to hydrological processes and phenomena in hydrosphere.

Learning outcomes

Acquired knowledge on hydrological terms and qualifications for causal understanding of problems referring to natural laws related to occurrence of hydrological processes and phenomena.

Syllabus

Theoretical part: Topics, tasks and division of Hydrology. Basic hydrological concepts. Water cycle in the nature and water balance. Groundwater and its origin, conditions of emergence, feeding and movement types. Types and features of aquifer. Physical and chemical features of groundwater. Types and features of springs. Significance of groundwater and their scope. Potamology and general potamology notions. River valley and river bed. Main features of river water and its movement. Rive regime, factors and typology. Origin, types, distribution, erosion and accumulation activities and hydrological significance of glaciers. Origin and types of lakes, water balance and movement. Main features of lake waters. Distribution and significance of lakes. Origin, types and distribution of marshes. World seas and salt water features and movements. Economic significance of world seas.
Practilac part: Methodology of hydrological annuals utilisation and statistical processing of certain data. Methodology of studying aquifers. Methodology of defining borders and morphometrical features of the river basin. Methodology of defining borders and morphometrical features of water courses. Methodology of studying the river regime. Methodology of defining morphometrical features of lakes. SONAR – a device used to measure the depth of water. Seminar paper preparation. Fieldwork.

Literature

1. Dukić D, Gavrilović, LJ. 2006. Hidrologija. Zavod za udžbenike i nastavna sredstva, Beograd.
2. Dukić, D. 1984. Hidrologija kopna. Naučna knjiga, Beograd.
3. Petrović, J., Bogdanović, Ž., Pavić, D. 2004. Hidrologija – Podzemne vode. Univerzitet u Novom Sadu, Prirodno-matematički fakultet, Departman sa geografiju, turizam i hotelijerstvo, Novi Sad.
4. Davie, T. 2008. Fundamentals of Hydrology. Second Edition. Taylor&Francis Group.
5. Prohaska, S., Petković, T., Ristić, V. 2001. Praktikum iz hidrologije. Rudarsko-geološki fakultet, Beograd.
6. Pavić, D. 2006. Vodni režim i pravci oticanja freatske izdani Bačke. Univerzitet u Novom Sadu, Prirodno-matematički fakultet, Departman za geografiju, turizam i hotelijerstvo, Novi Sad, str. 92.
7. Pavić, D., Mészáros, M., Ćurčić, G. 2012. Main Characteristics of Water Regime of the Phreatic Aquifer in Subotica Municipality (Vojvodina, Serbia). *Geographica Pannonica*, *16*(4): 136–144.
8. Dragićević, S., Nenadović, S., Jovanović, B., Milanović, M., Novković, I., Pavić, D. and Lješević, M. 2010. Degradation of Topciderska River Water Quality (Belgrade). *Carpathian Journal of Earth and Environmental Sciences*, *5*(2): 177–184.

Weekly teaching load: 5 (75)	**Lectures: 3**	**Exercises: 2**

Methods of Teaching

Lectures, Illustration and Demonstration, Fieldwork.

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**
Colloguia	**20-40**	.....	
Seminar paper	**0-5**		