

COURSE DESCRIPTION

Type of study full-time 1st degree (BSc)	Field of study Landscape Architecture						
Specialization Green Areas Management							
Code AK 2005	Course name (acc. to curricula of study) Physiography II	ECTS point 4					
Unit running the course Dep. of Environmental Protection and Management		Semester III					
Number of hours in semester	L – 15	A – 0	Lb – 0	Ws – 30	D – 0	S – 0	
Learning outcomes Students can understand of the relationships between the elements of the natural environment and natural processes and forms of land management; define the features of the natural landscape of Poland; practical use of the natural information sources; combine decisions considering various forms of land management with their natural determinants.							
Prerequisites: Physiography I							
Frame programme The hydrological cycle, water balance of the Earth. Water resources. Catchment. Rivers, surface water networks. River gauging, depth of river, river flow. Runoff, river regimes, drought and flood. Flood routing. Water balance. Water management. The origin of groundwater. Water in the vadose zone. Water in the phreatic zone. Aquifer. Unconfined groundwaters. The relationship between unconfined groundwater and river water. Confined groundwaters. Groundwater movement. Chemical composition of natural waters. Migration of elements. Hydrological and hydrogeological maps. Surface water and groundwater of Poland.							
Form of lecture assessment							
Kolloquium	<input type="checkbox"/>	Final test	<input checked="" type="checkbox"/>	Written exam	<input type="checkbox"/>	Oral exam	<input type="checkbox"/>
References: 1. Bajkiewicz-Grabowska E., Mikulski Z., 2010. Hydrologia ogólna. Wyd. Naukowe PWN, Warszawa. 2. Byczkowski A., 1999. Hydrologia, t. I i II. Wyd. SGGW, Warszawa. 3. Macioszczyk A. (red. nauk.), 2007. Hydrogeochemia strefy aktywnej.... Wyd. Nauk. PWN, Warszawa. 4. Macioszczyk A. (red. nauk.), 2011. Podstawy hydrogeologii stosowanej. Wyd. Nauk. PWN, Warszawa. 5. Mikulski Z., 1998. Gospodarka wodna. Wyd. Nauk. PWN, Warszawa. 6. Shaw E. M., 2005 (e-book). Hydrology in Practice. Taylor & Francis. 7. 8.							
The content was worked out by: dr Piotr Kondratiuk					Date: 2011-10-01		
Supervisor of unit (departament): dr hab. Piotr Banaszuk							

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