



Course number		Course title : Water resource management and waste water disposal	
Number of weeks: 1	Contact hours:		Learning hours: 4h x 5days
Pre-requisites: basics of Water Supply		Credits : 5	
Course coordinator Assoc.prof. Ing. Štefan Stanko, PhD.		Lecturers : Assoc.prof. Ing. Štefan Stanko, PhD.	
Course description : Course will describe the information concerning the waste water collection through the sewer system, storm water collection, disposal of waste water, waste water treatment processes explanation. The lesson will power the lecture knowledges. The hydrotechnical calculation, system of drawings of sewer system and WWTP scheme.			
Syllabus: • Data required for sewer design, sewer system design concept, picking the most suitable system , designing sewer systems. • Methods for evaluating design flows of wastewater and rainwater from surface runoff, Design and assessment of profiles and dimensions of objects in sewer systems, sewer pipe materials and construction of objects in sewer systems. • Design of optimal technological concept of waste water treatment plants. • Design and assessment of objects for waste water and sludge treatment line. • Material and construction schemes of waste water treatment plant objects			
Learning outcomes: • The ability of decision making and objective evaluation of data needed for concept design of urban sewer systems. • overview of materials and construction designs used on various sewer system objects • The ability to design and evaluate projects in line with modern engineering techniques: ○ sewer systems and draining of sewage and rain water ○ waste water treatment and sludge processing			
Assessment: Credit and Final Exam (A,B,C,D,E,F,FX)			
Recommended texts and other learning resources: <i>T.Espolov, O.Zubairov, A.Tleukulov: THE USE OF WASTEWATER, PART ONE: Wastewater, Almaty, 2012</i> <i>Spellman F.: Handbook of Water and Wastewater Treatment Plant Operations, 2nd edition, 2008, ISBN: 1420075306.</i> <i>MacKenzie Davis, Water and Wastewater Engineering, Fourth Edition, McGraw-Hill Prof Med/Tech, 2010, ISBN 9780071713849</i> <i>Urcikán,P., Rusnák,D.: Sewerage and waste water treatment. Sewage 1 (2004). Stokovanie 2 (2008), Sewage 3 (2008). SUTBA Bratislava</i>			