

Study Programme: Civil Engineering			
Course Unit Title: Hydrotechnical Structures			
Course Unit Code: GH534			
Name of Lecturer(s): Kolaković Slobodan, Fabian Đula			
Type and Level of Studies: master			
Course Status (compulsory/elective): elective			
Semester (winter/ summer): winter			
Language of instruction: english			
Mode of course unit delivery (face-to-face/distance learning): face-to-face			
Number of ECTS Allocated: 3			
Prerequisites: none			
Course Aims: Enabling students from fundamental fields to acquire professional knowledge and application in practice.			
Learning Outcomes: Acquired knowledge is directly applied in practice, as well as in understanding and upgrading knowledge in other professional courses.			
Syllabus. Programme includes classification and properties of hydrotechnical structures, action of water onto structures, building and failure of structures. Special attention is attributed to the analysis of foundation (hydrological, hydraulic, geological and the like) for designing loads in such structures, building materials, seismic influences, static and dynamic influences. One chapter also includes the design of such structures, and combining elements are specially analysed (dam body, overflow, foundation outflow, pumping station, culvert, pipelines, etc), as well as possible consequences on the failure of such structures. The conditions and problems in building hydrotechnical structures will also be analysed.			
Required Reading: Relevant literature in English, tbd			
Weekly Contact Hours:2	Lectures: 2	Practical work: 2	
Teaching Methods: Teaching is performed interactively in the form of lectures, auditory and computer practice. At lectures, theoretical content is presented with characteristic examples for easier understanding of course content. In auditory practice, characteristic tasks are done and course content is presented in more details. Apart from lectures and practice, tutorials are also regular. A part of course content that constitutes a logical unit can be taken as a partial examination during the teaching process. Partial examinations are taken in written form and as tests. Examination grade is formed on the basis of: attendance at lectures and practice (auditory and computer), success in partial examinations and written part of the examination (combined exercises and theory).			
Knowledge Assessment (maximum of 100 points):			
Pre-exam obligations	points	Final exam	points
Attendance			
Computer exercises			
Tests (4x)			

