

COURSE		HYDROMECHANICS		
LECTURER		Prof. Zoran Milašinović Ph.D.		
STUDY	STATUS	SEMESTER	NUMBER OF LESSONS L+E	ECTS
B - CE	Compulsory	3	3 + 2	6
OBJECTIVES				
<ul style="list-style-type: none"> ▮ The main aim is that the candidate is qualified for hydraulic engineering calculations: flow in pipe lines, canals and structure for capturing and draining groundwater. 				
LEARNING OUTCOMES				
<ul style="list-style-type: none"> ▮ After completion of lectures and exercises candidate acquires basic knowledge: Understand the theoretical foundations and apply them to solve simple problems in hydrotechnics 				
COURSE CONTENT				
<ul style="list-style-type: none"> ▮ Definition and classification of fluids, physical properties. Fluid statics - Hydrostatics. Fluid kinematics and fluid dynamics. Euler's equations of fluid motion. Bernoulli's equation. The equation of change of momentum. Leaking fluid through the holes. Spillover / overflow and highlight below the weir. Measuring the speed and flow. Steady flow in pipes under pressure. Free surface of the steady flow. Hydraulic jump. 				
RECOMMENDED LITERATURE				
<ol style="list-style-type: none"> 1. Kupusović, T., 1998: Mehanika fluida, GF Sarajevo; 2. Kupusović, T., Milašinović, Z., 1984: Zbirka rješenih zadataka iz mehanike fluida, GF Sarajevo; 3. Prodanović, D., 2007: Mehanika fluida, GF Beograd; 4. Demirdžić, I., 1990: Mehanika fluida – Osnove, MF Sarajevo; 5. Jović, V., 2006: Osnove Hidromehanike, Element, Zagreb; 				
Examination:				
<p>During the classes the exam is taken in two parts in writing. Each part is scored as follows: test - 5 points, midterm exam - 35 points, a total of 40 points.</p> <p>a) If a student realizes 50% of both parts of the form his final score to a scale prescribed by the Law on Higher Education.</p> <p>b) Students who do not pass one of the parts during the classes, take the exam in writing integral and rating them form: 50% of the points awarded during the classes + 50% of points awarded at the final exam.</p> <p>c) After final exam students who have more than 55 points have choice to have oral exam (20 points in maximum) for greater final score, and students who have between 35 and 55 points need to take oral exam for final score.</p> <p>Cancelling exams: Students, who are not satisfied with the results achieved in final score, can take final exam again.</p>				