

Faculty of Civil Engineering / INFRASTRUCTURES / HYDROLOGY

Course:	HYDROLOGY			
Course ID	Course status	Semester	ECTS credits	Lessons (Lessons+Exercises+Laboratory)
11940	Mandatory	1	5	2+1+1
Programs	INFRASTRUCTURES			
Prerequisites				
Aims	Gaining basic knowledge of hydrology with an emphasis on building applications			
Learning outcomes				
Lecturer / Teaching assistant	Dr Goran Sekulić – prof.			
Methodology	Lectures, exercise, graphic works, colloquiums			
Plan and program of work				
Preparing week	Preparation and registration of the semester			
I week lectures	Introduction, hydrologic cycle			
I week exercises	Introduction, hydrologic cycle			
II week lectures	Water balance; hydrological data; Weather Service.			
II week exercises	Water balance; hydrological data; Weather Service.			
III week lectures	Hydrometeorology: atmospheric processes; climate and weather; measurement and analysis of meteorological variables: temperature, humidity, pressure, wind, evaporation.			
III week exercises	Hydrometeorology: atmospheric processes; climate and weather; measurement and analysis of meteorological variables: temperature, humidity, pressure, wind, evaporation.			
IV week lectures	Precipitation, origin, measurement and analysis.			
IV week exercises	Precipitation, origin, measurement and analysis.			
V week lectures	Hydrological systems and processes: hydrological systems and subsystems; basin as a system; physical parameters.			
V week exercises	Hydrological systems and processes: hydrological systems and subsystems; basin as a system; physical parameters.			
VI week lectures	Process parameters			
VI week exercises	Process parameters			
VII week lectures	FREE WEEK			
VII week exercises	FREE WEEK			
VIII week lectures	COLLOQUIUM I			
VIII week exercises	COLLOQUIUM I			
IX week lectures	Hydrometry, surveillance networks; measurement / observation of basic hydrological parameters.			
IX week exercises	Hydrometry, surveillance networks; measurement / observation of basic hydrological parameters.			
X week lectures	The basic data processing, hydrograph, hydrograph, flow curves; fault frequency and duration			
X week exercises	The basic data processing, hydrograph, hydrograph, flow curves; fault frequency and duration			
XI week lectures	Runoff Modelling: component hydrograph; Types of hydrological models.			
XI week exercises	Runoff Modelling: component hydrograph; Types of hydrological models.			
XII week lectures	Large and small water.			
XII week exercises	Large and small water.			
XIII week lectures	Regional analysis.			
XIII week exercises	Regional analysis.			
XIV week lectures	Probably the maximum precipitation and runoff.			
XIV week exercises	Probably the maximum precipitation and runoff.			

XV week lectures		COLLOQUIUM II				
XV week exercises		COLLOQUIUM II				
Student workload		Week 4.5 credits x 40/30 = 6 hours Total work hours for the course 4.5x30 = 135 hours				
Per week			Per semester			
5 credits x 40/30=6 hours and 40 minuts 2 sat(a) theoretical classes 1 sat(a) practical classes 1 excercises 2 hour(s) i 40 minuts of independent work, including consultations			Classes and final exam: 6 hour(s) i 40 minuts x 16 =106 hour(s) i 40 minuts Necessary preparation before the beginning of the semester (administration, registration, certification): 6 hour(s) i 40 minuts x 2 =13 hour(s) i 20 minuts Total workload for the subject: 5 x 30=150 hour(s) Additional work for exam preparation in the preparing exam period, including taking the remedial exam from 0 to 30 hours (remaining time from the first two items to the total load for the item) 30 hour(s) i 0 minuts Workload structure: 106 hour(s) i 40 minuts (courses), 13 hour(s) i 20 minuts (preparation), 30 hour(s) i 0 minuts (additional work)			
Student obligations						
Consultations						
Literature						
Examination methods			Knowledge checking is carried out continuously throughout the semester and the final exam. The minimum level of knowledge during the semester for pass rate is 51 points. The maximum possible number of points is 100 / semester.			
Special remarks			One part of the exercise must be carried out in the hydraulic laboratory. Laboratory training requires mandatory attendance at all sessions.			
Comment			Additional information can be obtained at the present teachers, assistants, head of the study program with Dean for Academic Affairs.			
Grade:	F	E	D	C	B	A
Number of points	less than 50 points	greater than or equal to 50 points and less than 60 points	greater than or equal to 60 points and less than 70 points	greater than or equal to 70 points and less than 80 points	greater than or equal to 80 points and less than 90 points	greater than or equal to 90 points