Course Unit Descriptor

Study Programme: Civil Engineering

Course Unit Title: Hydrology 1

Course Unit Code: 062

Name of Lecturer(s): Ognjen Gabrić

Type and Level of Studies: Bachelor Academic Degree

Course Status (compulsory/elective): compulsory

Semester (winter/summer): summer

Language of instruction: English

Mode of course unit delivery (face-to-face/distance learning): face-to-face

Number of ECTS Allocated: 6

Prerequisites:

Course Aims:
Introduction to processes in hydrologic cycle and water balance elements, measuring techniques of hydrologic parameters and data processing.

Learning Outcomes:
Student is introduced to major hydrologic principles.

Syllabus:
Theoretical part of the course
Week 1 – Hydrological units and terms: rainfall, runoff, volumes, levels
Week 2 – Rainfall data processing
Week 3 – Calculation of evapotransporation
Week 4 – Processing water level data
Week 5 – Hydrometry
Week 6 – Rating curve
Week 7 – Flow duration curves
Week 8 – Flow hydrograph
Week 9 – Water balance
Week 10 – Statistical analysis in hydrology 1
Week 11 – Statistical analysis in hydrology 1
Week 12 – Visiting Hydrometeorological service 1
Week 13 – Visiting Hydrometeorological service 1
Week 14 – Extreme river flows
Week 15 – Exam preparation
Practical part of the course
The practical part of the course closely follows the theoretical part

Required Reading:

1. 1. E. Zelenhasić, M. Ruski: Inženjerska hidrologija, Naučna knjiga, Beograd, 1991.
2. 2. E. Zelenhasić,: Stohastička hidrologija, Pan-Merkur, Kaligra, Novi Sad, 1997.
3. 3. S. Jovanović:Parametarska hidrologija, Skripta, Gradjevinski fakultet, Beograd, 1976.
4. 4. S. Jovanović: Primena matematicke statistike u hidrologiji, Gradjevinski fakultet, Beograd, 1977.
5. 5. R. K. Linsley, M. A. Kohler and J. L. H. Paulhus: Hydrology for Engineers, SI Metric Edition,
6. McGraw-Hill Book Company, 1988.

Weekly Contact Hours: 5	**Lectures:** 2	**Practical work:** 3

Teaching Methods:
lectures, exercises, practical work, colloquium, consultations

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	**Final exam**	points
Active class participation	5	written exam	40
Practical work	45	oral exam	10
Colloquium			
Seminar(s)			