



Course ID: HAHI11	Course name: WATER ANALYTICS		
Cycle: SECOND	Year: FIRST	Semester: I	ECTS credits: 6
Course status: ELECTIVE		Total course hours: 90 Lectures: 30 Laboratory: 60	
Teaching participants:	Teachers and associates with expertise in the field to which the subject belongs		
Prerequisite for enrollment:	-		
Course aims:	The acquisition of basic knowledge in the field of different types of water analysis.		
Thematic course units:	<ul style="list-style-type: none">- Water, term and definitions. Different aspects of water quality- Gases in water, oxygen, carbon dioxide and sulfur dioxide- Acidity and alkalinity of water- Metals in water. The hydrated metal ions.- Complexation of metal ions and species- Polyphosphates in water- Redox processes in water- pE-pH diagrams of distribution- Microbiological transformation of nitrogen and phosphorus in wastewater- Microbiological transformation of metals and metalloids in wastewater- Pollutants in water: cyanides, nitrites, nitrates and phosphates- Pollutants in water, metals- River sediments- ISO Legislation- BAS Legislation		
Learning outcomes:	Acquired basic knowledge in the field of different types of water analysis		
Teaching methodology:	Theoretical and practical classes		

Assessment methods and grading system¹:	Grading criteria		
	Criteria	Maximal score	Required score
	1. Class attendance	5	3
	2. Class activities	15	8
	3. Midterm	40	22
	4. Final exam	40	22
	Total	100	55
	Scores and grading		
	Score	Grade (B&H)	Grade (ECTS)
	< 55	5	F, FX
	55–64	6	E
	65–74	7	D
75–84	8	C	
85–94	9	B	
95–100	10	A	
Literature²:	<p>Mandatory literature:</p> <ol style="list-style-type: none"> Internal script <p>Supplementary literature:</p> <ol style="list-style-type: none"> L.M.L. Nollet, Handbook of Water Analysis, CRC Press, New York, 2000. R.L. Droste, Theory and practice of water and wastewater treatment, John Wiley and Sons, Inc., New York, 1997. Voda za piće, Standardne metode za ispitivanje higijenske ispravnosti, Savezni zavod za zdravstvenu zaštitu, Beograd, 1990. Guidelines for drinking-water quality, Health criteria and other supporting information, Second Edition, World Health Organization, Geneva, 1996. 		

¹The grading structure for each subject is determined by the Council of the organizational unit before the beginning of the academic year in which the subject is taught as per Article 64, paragraph 6 of the Law on Higher Education of Sarajevo Canton

²The Senate of the higher education institution, as an institution, or the Council of the organizational unit of the higher education institution, as a public institution, determines by a special decision, which is published on its website before the beginning of the academic year obligatory, mandatory and recommended textbooks and manuals, as well as other recommended literature based on which exams are prepared and taken as per Article 56, paragraph 3 of the Law on Higher Education of the Sarajevo Canton