



UNIVERSITY OF SARAJEVO – FACULTY OF SCIENCE
Department of Chemistry

Form SP2

Page 1 of 4

Course ID: HFH309	Course name: SURFACTANTS		
Cycle: FIRST	Year: THIRD	Semester: VI	ECTS credits: 3
Course status: ELECTIVE		Total course hours: 45 Lectures: 30 Laboratory: 15	
Teaching participants:	Teachers and associates with expertise in the field to which the subject belongs		
Prerequisite for enrollment:	-		
Course aims:	Introduction of basic knowledge about surfactants.		
Thematic course units:	1. Surface free energy, surface tension. 2. Molecular structure of surfactants. 3. Types of surfactants, charge on the hydrophilic functional group. 4. Biodegradability. 5. Technologically important surface phenomena. 6. Capillarity. 7. Physical and chemical adsorption. Formation of monomolecular films. 8. Wetting and adhesion. 9. Application of surfactants		
Learning outcomes:	Students will have knowledge in surfactants. Knowledge: Acquired knowledge on surfactants. Knowledge: Acquired knowledge on surfactants. Skills: Students will be able to prepare and characterize different surfactants. Competences: Application of specific knowledge in other branches of chemistry.		
Teaching methodology:	Lectures (Oral presentation and interactive teaching) Laboratory exercises		
Assessment methods and grading system¹:	Grading criteria		
	Criteria	Maximal score	Required score
	1. Class attendance	5	3
	2. Class activities	15	8
	3. Midterms	2 × 20	2 × 11
	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	

1

The 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

	75–84	8	C
	85–94	9	B
	95–100	10	A
Literature²:	Mandatory literature: <ol style="list-style-type: none"> 1. D. Y. Mayers, Surfactant Science and Technology, VCH Publishers, Inc., New York 1992; 2. D.C. Cullum, Introduction to Surfactants Analysis, Blackie Academic and Professional, 1994; K. Holmberg, Novel surfactants, Marcel Dekker, New York, 2003; 3. K. R. Lange, Surfactants: A Practical Handbook, 2004; 		

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