



Course ID: HFHxxx	Course name: CONDUCTING POLYMERS		
Cycle: SECOND	Year: FIRST	Semester: I	ECTS credits: 4
Course status: ELECTIVE	Total course hours: 60 Lectures: 45 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 conducting polymers.		
Thematic course units:	1. Definitions, basic types of conducting polymers. Structure and physico-chemical properties. 2. Chemical and electrochemical synthesis of conducting polymers. Polymerization mechanisms. 3. Preparation of nanostructured conducting polymers. 4. Doping and conductivity mechanism. 5. Electrochemical properties of conducting polymers. 6. Other important properties of conducting polymers. 7. Application of conducting polymers.		
Learning outcomes:	Students will have knowledge in conducting polymers. Knowledge: Acquired knowledge on conducting polymers. Skills: Students will be able to prepare and characterize different conducting polymers. 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)	

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

	< 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"> 1. P. Chandrasekhar, Conducting polymers, fundamentals and applications: a practical approach, Springer 1999. 2. G. Inzelt, Conducting Polymers - A New Era in Electrochemistry, Springer 2008. 3. G.G. Wallace, G.M. Spinks, L.A.P. Kane-Maguire, P.R. Teasdale, Conductive electroactive polymers: intelligent polymer systems 3rd edition, Taylor & Francis Group 2009. 		

² The 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