



Course ID: HOAI07	Course name: SPECIAL TOPICS IN INORGANIC CHEMISTRY		
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:	Introducing students to the properties and importance of inorganic compounds in everyday life with a focus on medicine, pharmacy and the environment.		
Thematic course units:	<ol style="list-style-type: none">1. Inorganic compounds in medicine.2. Review, properties and assumptions for the use of inorganic compounds in medicine.3. Inorganic compounds in pharmaceutical industry.4. Ecotoxicology of inorganic compounds.5. Nanomaterials and their impact on living organisms.6. Nanomaterials in medicine.7. Toxicity of nanomaterials based on carbon, metals and oxides.		
Learning outcomes:	<p><i>Knowledge:</i> Describe the properties and assumptions for the application of inorganic compounds in everyday life.</p> <p><i>Skills:</i> Explain the principles of synthesis of various inorganic compounds used in medicine, pharmacy and the environment.</p> <p><i>Competences:</i> Argue the importance of synthesis and application of various inorganic compounds in everyday life, medicine, pharmacy and the environment.</p>		
Teaching methodology:	Method of oral presentation, method of practical work, method of research.		

Assessment methods and grading system¹:	Grading criteria		
	Criteria	Maximal score	Required score
	1. Class attendance	5	2
	2. Class activities	5	3
	3. Midterms	45	25
	4. Final exam	45	25
	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> <p>1. /</p> <p>Supplementary literature:</p> <ol style="list-style-type: none"> Farrell NP, editor. <i>Uses of Inorganic Chemistry in Medicine</i>. Cambridge: Royal Society of Chemistry; 1999. Alessio E, editor. <i>Bioinorganic Medicinal Chemistry</i>. 1st ed. Weinheim: Wiley-VCH; 2011. Jones C, Thornback J. <i>Medicinal Applications in Coordination Chemistry</i>. 1st ed. Cambridge: Royal Society of Chemistry; 2007. Luther GW. <i>Inorganic Chemistry for Geochemistry and Environmental Sciences: Fundamentals and Applications</i>. Chichester, West Sussex: John Wiley and Sons; 2016. Swaddle TW. <i>Inorganic Chemistry: An Industrial and Environmental Perspective</i>. San Diego: Academic Press; 1997. Durán N, Guterres SS, Alves OL, editors. <i>Nanotoxicology: Materials, Methodologies, and Assessments</i>. New York: Springer; 2013. 		

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

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