Course ID: HAH407	**Course name:** SELECTED METHODS IN ANALYTICAL CHEMISTRY		
Cycle: FIRST	**Year: FOURTH**	**Semester:** VII	**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** [do not enter names in this section. Leave the wording as indicated in this section]		
Prerequisite for enrollment:	-		
Course aims:	Acquisition of knowledge and laboratory skills from methods of separation and/or overconcentration of analytes (heavy metals) from samples of a complex matrix, and techniques in the analysis of species species		
Thematic course units:	1. Methods of separation 2. Separations in inorganic analysis 3. Separation by precipitation 4. Sequential extraction of certain elements from the complex samples 5. Solid-phase extraction 6. Reactions of masking and unmasking 7. Separation with ion exchanger 8. Knowledge test 9. AAS: cold vapor technique 10. Analysis of volatile elements (As, Se, Hg) 11. Thermogravimetric method 12. Thermogravimetric analysis (TGA) 13. Differential thermogravimetric analysis (DTA) 14. Differential scanning calorimetry (DSC)		
Learning outcomes:	The student will be able to: - state and explain the theoretical settings of the methods of separation and overconcentration of heavy metals from real samples, - analyze a given sample of a complex matrix on the content of species by applying appropriate separation methods as well as measurement techniques		
Teaching methodology:	Lectures (oral presentation of teachers - presentations) and laboratory exercises (practical work)		

Assessment methods and grading system[1]:

Grading criteria			
	Criteria	Maximal score	Required score
1.	Class attendance	5	3
2.	Class activities*	10	5
3.	Midterms	45	25
4.	Final exam	40	22
	Total	100	55

* Class activity is sccored through the engagement of students in exercises.

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

Literature[2]:

Supplementary literature:

1. Savić J, Savić M. Osnovi analitičke hemije: klasične metode. Sarajevo: Svjetlost; 1987.
2. Skoog DA, West DM, Holler FJ. Osnovi analitičke kemije. 6th ed. (englesko), I izd. (hrvatsko). Zagreb: Školska knjiga; 1999.
3. Lederer M. Chromatography for Inorganic Chemistry. Chichester: John Wiley and Sons; 1994.
4. Anderson R. Sample Pretreatment and Separation (Analytical Chemistry by Open Learning). John Wiley and Sons; 1987-reprinted 1995.

[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