Course ID: HAH242	**Course name: ANALYTICAL CHEMISTRY III**		
Cycle: FIRST	**Year: SECOND**	**Semester: IV**	**ECTS credits: 6**
Course status: MANDATORY		**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:	Acquisition of basic knowledge and laboratory skills from quantitative analytical chemistry-volumetric analysis.		
Thematic course units:	- Volumetric methods; division; performance conditions - Methods based on acid-based reactions - Titration of weak bases; titration of polyprotic acids and bases; indicators - Tasks related to acidimetry and alkalimetry - Methods based on complex formation reactions - Indicators in complexometry and determination of the end point of titration - Selectivity of complexometric titrations; the impact of secondary reaction - Methods based on precipitation reactions - Titration of the halide mixture; application of the method - Methods based on redox reactions - Redox indicators; titration of an oxidant or reducer mixture - Previous oxidations and reductions; standard solutions for redox titrations - Tasks related to redox titration - Titrations in a non-aqueous medium; choice of amphiprotic solvents - Separation and concentration methods; sedimentation separation; deposition with collector		
Learning outcomes:	Acquired basic knowledge and laboratory skills from quantitative analytical chemistry-volumetric analysis.		
Teaching methodology:	Theoretical and practical classes		

Assessment methods and grading system[1]:

Grading criteria		
Criteria	Maximal score	Required score
1. Class attendance	5	3
2. Class activities	20	11
3. Midterm	35	19
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

Literature[2]:

Mandatory literature:

1. Savić J, Savić M. Osnovi analitičke hemije: klasične metode, Sarajevo, Svjetlost; 1987.
2. Praktikum iz volumetrije (Interna skripta). Sarajevo: Prirodno-matematički fakultet.

Supplementary literature:

1. Skoog DA, West DM, Holler FJ. Osnovi analitičke kemije. 6th ed. (englesko), I izd. (hrvatsko). Zagreb: Školska knjiga; 1999.
2. Harvey D. Modern Analitytical Chemistry. De Pauw University, McGraw-Hill Higher Education; 2000.

[1] The grading structure for each subject is determined bythe 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