

ANALYTICAL CHEMISTRY LABORATORY I

1	Course Title:	ANALYTICAL CHEMISTRY LABORATORY I	
2	Course Code:	KIM2005	
3	Type of Course:	Compulsory	
4	Level of Course:	First Cycle	
5	Year of Study:	2	
6	Semester:	3	
7	ECTS Credits Allocated:	4.00	
8	Theoretical (hour/week):	0.00	
9	Practice (hour/week):	0.00	
10	Laboratory (hour/week):	4	
11	Prerequisites:		
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Prof. Dr. BELGIN İZGİ	
15	Course Lecturers:	Prof. Dr. Cevdet DEMİR Doç. Dr. M. Haluk TÜRKDEMİR Doç. Dr. Belgin İZGİ Doç. Dr. Elif TÜMAY ÖZER Doç. Dr. Saliha ŞAHİN	
16	Contact information of the Course Coordinator:	belgin@uludag.edu.tr 0 224 29 41 728	
17	Website:		
18	Objective of the Course:	To gain the ability to students make a personal observation, experience of writing the analysis schemes, the skills in eliminating the potential interference problems, experience to analysis of current samples, analytic thinking ability.	
19	Contribution of the Course to Professional Development:		
20	Learning Outcomes:		
		1	Learns systematic qualitative chemical analysis.
		2	Puts into practice systematic qualitative chemical analysis in laboratory.
		3	Defines test reactions of cations and anions.
		4	Separate the cations and anions, can be tested.
		5	Analyzes qualitatively cations and anions in an unknown sample.
		6	
		7	
		8	
		9	
		10	
21	Course Content:		
		Course Content:	
Week	Theoretical	Practice	
1		Cations pre-experiments and notification of the basic rules of the laboratory	

2		I. group cations and systematic analysis (HCl group cations)
3		II. group cations and systematic analysis (H ₂ S group cations)
4		III. group cations and systematic analysis ((NH ₄) ₂ S group cations)
5		IV. and V. group cations and systematic analysis ((NH ₄) ₂ CO ₃ and soluble group cations)
6		I-V. group cations and systematic analysis (All group cations)
7		Anions pre-experiments
8		I. group (Ba(Ac) ₂ group anions) and II. group (Ca(Ac) ₂ group anions) anions and systematic analysis
9		III. group (Cd(Ac) ₂ group anions), IV. And V. group (AgAc and soluble group anions) anions and systematic analysis
10		I-V. group anions and systematic analysis (All group anions)
11		
12		Systematic analysis in a solid and unknown sample
13		Systematic analysis in a solid and unknown sample
14		Systematic analysis in a solid and unknown sample

22	Textbooks, References and/or Other Materials:	1) Skoog, West, Holler, çeviri editörleri (Prof.Dr.E.Kılıç, Prof.Dr.F.Köseoğlu), 1996 "Analitik Kimya" Cilt 1. ve 2. 2) KMY 2253 Analitik Kimya I Laboratuvarı Deney Föyü
----	---	--

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	1	0.00	0.00
Practicals/Labs	14	4.00	56.00
Self study and preparation	10	1.00	10.00
Homeworks	10	1.00	10.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm Assessment	1	10.00	10.00
Others	0	0.00	0.00
Final Exams	1	20.00	20.00
Midterm Exam	1	25.00	25.00
Total Work Load			114.00
Total work load/ 30 hr			3.80
Home work project			
ECTS Credit of the Course			4.00
Final Exam	1	50.00	50.00
Total	25	100.00	
Contribution of Term (Year) Learning Activities to Success Grade		50.00	
Contribution of Final Exam to Success Grade		50.00	
Total		100.00	
Measurement and Evaluation Techniques Used in the Course			

24	ECTS / WORK LOAD TABLE
----	-------------------------------

25	CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS															
	PQ1	PQ2	PQ3	PQ4	PQ5	PQ6	PQ7	PQ8	PQ9	PQ10	PQ11	PQ12	PQ13	PQ14	PQ15	PQ16
ÖK1	4	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
ÖK2	0	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK3	0	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK4	0	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK5	0	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contribution Level:	1 very low			2 low			3 Medium			4 High			5 Very High			