ARCHEOLOGY AND CHEMISTRY

1	Course Title:	ARCHEOLOGY AND CHEMISTRY	
2	Course Code:	KIM4076	
3	Type of Course:	Optional	
4	Level of Course:	First Cycle	
5	Year of Study:	4	
6	Semester:	7	
7	ECTS Credits Allocated:	5.00	
8	Theoretical (hour/week):	3.00	
9	Practice (hour/week):	0.00	
10	Laboratory (hour/week):	0	
11	Prerequisites:	None	
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Doç. Dr. HASENE MUTLU GENÇKAL	
15	Course Lecturers:	Prof. Dr. Belgin İZGİ Doç. Dr. Ümran Seven ERDEMİR	
16	Contact information of the Course Coordinator:	hasenem@uludag.edu.tr +90 224 2941734 Bursa Uludağ Üniversitesi Fen-Edebiyat Fakültesi Kimya Bölümü 16059 Görükle / BURSA Bursa Uludag University Faculty of Sciences and Arts Department of Chemistry 16059 Gorukle / BURSA	
17	Website:		
18	Objective of the Course:	The course aims to give the students sufficient information about the use of chemistry in archeology.	
19	Contribution of the Course to Professional Development:	To have the ability to transfer knowledge of chemistry to different disciplines, To establish a technical and scientific relationship between chemistry and archeology	
20	Learning Outcomes:		
		1	To understand the use of chemistry in archeology
		2	To teach the chemistry and technologies of archaeological materials
		3	Methods of chemical analysis of archaeological materials and interpretation of results
		4	Preservation of archaeological material
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21	Course Content:		
	Course Content:		

Week	Theoretical	Practice
1	Terms and Concepts about Archeology, Archeometry and Chemistry, Archaeological Chemistry	
2	History of Archaeological Chemistry, Current Status and Scope of Archaeological Chemistry	
3	What archaeologists want to know about archaeological artifacts	
4	Cellulose, hemicellulose, lignin and foreign compounds, cell types and plastic composites of wood	
5	Minerals, Stones, and Rocks	
6	Sediments and soils, pottery	
7	Bones and teeth	
8	Metals and coins, other materials	
9	Glass and glassy materials, building materials, pigments and dyes	
10	Analysis methods of archaeological materials: Microscopic methods	
11	Analysis methods of archaeological materials: Methods for element and isotope analysis	
12	Analysis methods of archaeological materials: Molecular analysis methods	
13	Restoration and Protection of Archaeological Materials, Archaeological Chemistry Studies and Some Examples in Turkey	
14	Archaeological Materials, Archaeological Chemistry Studies and Some Examples in Turkey	

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	3.00	42.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	14	3.00	42.00
Homeworks	1	10.00	10.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	20.00	20.00
Others	0	0.00	0.00
Final Exams	1	40.00	40.00
Total Work Load			174.00
Total work load/ 30 hr			5.13
ECTS Credit of the Course			5.00

22	Textbooks: References and/or Other	1. Arkeokimyaya Genel Bakış, Sevi Öz, Sahinde Demirci. 2. J. Douglas Price • James H. Burton, An Introduction to Archaeological Chemistry, Springer, 2012. 2007. 4. A.M. Pollard, Archaeological Chemistry, Springer, 1996.
23	Assesment	
	Midterm Exam	1 20.00
	Home work-project	1 20.00
	Final Exam	1 60.00
	Total	3 100.00
	Contribution of Term (Year) Learning Activities to Success Grade	40.00
	Contribution of Final Exam to Success Grade	60.00
	Total	100.00
	Measurement and Evaluation Techniques Used in the Course	Homework (presentation) The system of relative evaluation is applied.
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	0	4	2	4	0	0	2	0	0	2	0	2	0	0	0	0
ÖK2	0	3	2	4	0	0	2	0	0	2	0	4	0	0	0	0
ÖK3	0	4	2	4	0	0	2	0	0	2	0	4	0	0	0	0
ÖK4	0	3	2	4	0	0	2	0	0	2	0	3	0	0	0	0
LO: Learning Objectives PQ: Program Qualifications																
Contribution Level:	**1 very low**		**2 low**		**3 Medium**		**4 High**			**5 Very High**						