



YOZGAT BOZOK UNIVERSITY FACULTY OF ARTS AND SCIENCES
CHEMISTRY DEPARTMENT COURSE PLAN

Course Code	Course Title	Semester	Course Type (C/E)	T+A+L (Time/Week)	Credit	ECTS	Course Language
KİM704	Archaeochemistry	1-2	E	2+0+0		4	Turkish

COURSE INFORMATION

Course Catalog Description (Content)	Definition and History of Archaeology, What Archaeologists Want to Know?, Archaeological Materials, Analysis Methods, Archaeological Studies in Turkey and Examples from These Studies
The Aim of the Course	The aim of this course is to give information about the application of chemistry-based analysis techniques on archaeological and historical artifacts and to teach the necessary information for a more accurate interpretation of historical findings.
Course Level	Bachelor degree
Course Language	Turkish
Teaching method	(X) Formal () Online () Mixed/Hybrid
Teaching Staff of the Course	Asst. Prof. Dr. Hatice ARI
Prerequisite Course(s) of the Course	-
Learning Outcomes from the Course	<ol style="list-style-type: none">1- Explain the relationship between the physical and chemical properties of archaeological artifacts and their chemical composition.2- Explain the chemical analysis methods of archaeological materials.3- Know the chemical formulas and structures of archaeological materials.4- Can explain the history and development of archaeochemistry.5- Will be able to define the concepts related to archaeochemistry and archeometry.

COURSE CONTENT

Week	Theory	Practice/Laboratory
1	Archaeochemistry and Archeometry	
2	Terms and Concepts Related to Archaeochemistry	
3	History of Archaeochemistry	
4	Current Situation and Scope of Archaeochemistry	
5	What Archaeologists Want to Know About Archaeological Artifacts	
6	Archaeological Materials and Chemical Properties	
7	Archaeological Materials and Chemical Properties	
8	Archaeological Materials and Chemical Properties	
9	Analysis Methods of Archaeological Materials	
10	Analysis Methods of Archaeological Materials	
11	Analysis Methods of Archaeological Materials	
12	Identification and Verification in Archaeological Artifacts	
13	Identification and Verification in Archaeological Artifacts	
14	Archaeochemistry Studies in Turkey and in the World and Some Examples	

15	Final Exam
----	------------

Course Learning Resources

1. Sevi Öz, Şahinde Demirci, Arkeokimyaya Genel Bakış, Gazi Kitabevi, Ankara, 2017.
2. T. Douglas Price, James H. Burton, An Introduction to Archaeological Chemistry, Springer, 2011.
3. A. Mark Pollard, Carl Heron, Ruth Ann Armitage, Archaeological Chemistry, royal Society of Chemistry, 3rd Edition, 2016.

ASSESSMENT CRITERIA

Work Activities During the Semester	Number	Contribution
Homework	1	30
Practice		
Forum/ Discussion Application		
Short Exam (Quiz)	2	70
Ratio Of Semester Studies To Semester Success (%)		%40
Ratio of Final to Success (%)	1	%60
Total		%100

COURSE WORKLOAD TABLE

Activity	Total Weeks	Duration (Weekly Hours)	Total Workload
Theory	14	2	28
Practice			
Forum/ Discussion Application			
Reading	14	1	14
Internet Scanning, Library Study			
Individual study	14	1	14
Brainstorming	3	5	15
Presentation Preparation			
Presentation			
Final Exam	1	2	2
Preparation for the Final Exam	4	5	20
Diğer (Belirtiniz: Homework)	1	7	7
Total Workload			100
Total Workload / 25 (s)			100/25
ECTS Credits of the Course			≅4
Note: The workload of the course will be determined by the instructor on a per-course basis.			

PROGRAM LEARNING OUTPUTS CONTRIBUTION LEVELS

No	Program Learning Outputs	1	2	3	4	5
1	Gains extensive knowledge about the basic chemical properties of matter and uses this knowledge in daily life, industrial scale, and practical chemistry and shares them with the society.					X
2	Performs experiments, collects data, interprets, evaluates results, defines problems parallel to current technological developments, produces solutions against problems encountered in the laboratory.				X	
3	Calculates and processes chemical information and data.			X		
4	Applies her/his knowledge and understanding of chemistry to the solution of unconventional qualitative and quantitative problems.				X	

5	Defines and comprehends chemical concepts and theories in Inorganic Chemistry, Organic Chemistry, Physical Chemistry, Analytical Chemistry, Biochemistry.				X	
6	Can conduct research in the light of scientific data on any subject in the field of chemistry.					X
7	Writes, presents, discusses scientific material, and presents it orally to a knowledgeable audience.					X
8	Brings a chemical approach to the solution of environmental problems, makes environmental analyzes and reports.					X
9	Knows a foreign language at a level to read and understand the basic terms and processes of the chemist profession.				X	
10	Can use computer software and information and communication technologies at the level required by the field.			X		
11	Adapts and transfers the knowledge gained in the field to secondary education.					X
12	Apart from the field of chemistry, she/he gains knowledge in different branches of science that she feels close to.					X
13	Carries out a study independently, makes group work and gains the awareness of taking responsibility.					X
14	They can develop a positive attitude towards lifelong learning and constantly renew their professional knowledge and skills.				X	
15	Have sufficient awareness of the universality of social rights, social justice, quality culture and protection of cultural values, environmental protection, occupational health and safety.					X

Bozok