

ENGINEERNG IN ANCIENT PERIOD

1	Course Title:	ENGINEERNG IN ANCIENT PERIOD	
2	Course Code:	ARK0519	
3	Type of Course:	Optional	
4	Level of Course:	First Cycle	
5	Year of Study:	2	
6	Semester:	3	
7	ECTS Credits Allocated:	4.00	
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:	Prof. Dr. İBRAHİM HAKAN MERT	
15	Course Lecturers:		
16	Contact information of the Course Coordinator:	Uludağ Üniversitesi Fen-Edebiyat Fakültesi Arkeoloji Bölümü Görükle- Bursa 16059 0.224.2941839/ e-mail: guvengumgum@uludag.edu.tr	
17	Website:		
18	Objective of the Course:	The main purpose of the course is to introduce of the ancient engineering and technologies which were used especially in architecture and construction activities. Besides ancient shipbuilding and lighting technologies and warfare techniques will also be examined.	
19	Contribution of the Course to Professional Development:	Students will gain intellectual development, to recognize the developments in the field of engineering since the existence of humanity.	
20	Learning Outcomes:		
		1	Recognizing of the ancient construction techniques and practices.
		2	Understanding of the technological progress of construction practices from the beginning until the Late Antiquity.
		3	To know building requirements.
		4	Recognizing of the tools and technologies which were used in ancient architecture
		5	Understanding of organisation schema of ancient building projects.
		6	Recognizing of management system of ancient quarries in Roman Period.
		7	Recognizing of the large-scale ancient substructure projects such as road, drainage and sewer systems.
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21	Course Content:		
		Course Content:	
Week	Theoretical	Practice	

1	Examining the course topics and terminology about the course. Introduction to ancient engineering and basic concepts	
2	The construction methods and stone tool industry of Prehistoric and Protohistoric Ages	
3	Mining Technology in Bronze Age	
4	Construction Technologies in ancient Egypt	
5	Construction Methods in Hittite Civilization	
6	Minting technology in Lydian Civilization	
7	Building Technology in Ancient Greece	
8	Innovations and Practices of Roman Civilization on structural engineering	
9	Ancient water facilities and harbor technologies	
10	Ancient Maritime Technologies (Ships and lighthouses)	
11	Construction techniques of ancient harbors	
12	Ancient stone working and lifting tools	
13	Ancient worksite organisations and ancient sources about the topic	
14	General assesment	

22	Textbooks, References and/or Other Materials:	F. Kretzschmer, Antik Roma'da Mimarlık ve Mühendislik (İstanbul 2000).		
Activites		Number	Duration (hour)	Total Work Load (hour)
23	Theoretical Assessment	14	3.00	42.00
	Practicals/Labs	0	0.00	0.00
	Self study and preperation	14	2.00	28.00
	Midterm Exam	1	40.00	
	Homeworks	0	0.00	0.00
	Quiz	0	0.00	0.00
	Projects	0	0.00	0.00
	Home work project	0	0.00	0.00
	Field Studies	0	0.00	0.00
	Final Exam	1	25.00	25.00
	Midterm exams	1	40.00	
	Total	0	0.00	
	Others	0	0.00	0.00
	Contribution of Term (Year) Learning Activities to Final Exams	1	25.00	25.00
	Success Grade	1	25.00	25.00
	Total Work Load			120.00
	Contribution of Final Exam to Success Grade	1	25.00	25.00
	Total work load/ 30 hr			4.00
	Total	140.00		
	ECTS Credit of the Course			4.00
	Measurement and Evaluation Techniques Used in the Course	The system of relative evaluation is applied.		

24	ECTS / WORK LOAD TABLE
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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	1	1	3	5	1	4	1	1	3	1	3	3	0	0	0	0
ÖK2	1	1	3	5	1	4	1	1	3	1	3	3	0	0	0	0
ÖK3	1	1	3	5	1	4	1	1	3	1	3	3	0	0	0	0

ÖK4	1	1	3	5	1	4	1	1	3	1	3	3	0	0	0	0
ÖK5	1	1	3	5	1	4	1	1	3	1	3	3	0	0	0	0
ÖK6	1	1	3	5	1	4	1	1	3	1	3	3	0	0	0	0
ÖK7	1	1	3	5	1	4	1	1	3	1	3	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							