THE MATERIAL PROBLEMS AND THEIR REMEDIES IN BUILDINGS

1	Course Title:	THE MATERIAL PROBLEMS AND THEIR REMEDIES IN BUILDINGS
2	Course Code:	MIM3028
3	Type of Course:	Optional
4	Level of Course:	First Cycle
5	Year of Study:	3
6	Semester:	6
7	ECTS Credits Allocated:	3.00
8	Theoretical (hour/week):	2.00
9	Practice (hour/week):	0.00
10	Laboratory (hour/week):	0
11	Prerequisites:	-
12	Language:	Turkish
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Doç.Dr. ZEHRA SEVGEN PERKER
15	Course Lecturers:	-
16	Contact information of the Course Coordinator:	zsperker@uludag.edu.tr
17	Website:	
18	Objective of the Course:	The aim of this course is to teach that material problems in buildings, these principles and methods of problem identification and analysis of solution methods for solving the problems.
19	Contribution of the Course to Professional Development:	This course contributes to professional development in solving the material problems in existing buildings and correct use of materials in new building design by providing recognition of building material problems and solution alternatives.
20	Learning Outcomes:	
	1	Teaching material problems in buildings
	2	Teaching material issues of design, structural systems, the application range of the sources of problems and solution methods use a holistic perspective
	3	Teaching structures of materials of contemporary principles and methods used to analyze problems and identify problems with the materials referenced in the current methods of preventing and eliminating
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21	Course Content:	

Course Content:

Week	Theoretical	Practice
1	The importance of structure, material, identification problems of material	

2	Classification of problems in structured materials	
3	Classification of problems in structured materials	
4	Principles underlying the structure of materials and methods used in analysis and detection of problems	
5	Natural stone building material used in removing problems, common problems and solution methods for the prevention	
6	Wood construction material used in removing problems, common problems and solution methods for the prevention	
7	Adobe construction material used in removing problems, common problems and solution methods for the prevention	
8	Brick construction material used in removing problems, common problems and solution methods for the prevention	
9	Concrete construction material used in removing problems, common problems and solution methods for the prevention	
10	Metal construction material used in removing problems, common problems and solution methods for the prevention	
11	Binding construction material used in removing problems, common problems and solution methods for the prevention	
12	Binding construction material used in removing problems, common problems and solution methods for the prevention	
13	Structure were the other materials (plastic, glass, bitumen and tar-based materials, etc.). common problems and solutions to problems in the methods used in the prevention	
14	Homeworks Presentation	

22	Textbooks, References and/or Other Materials:	Eriç, M., (1994). Yapı Fiziği ve Malzemesi, Literatür Yayıncılık, İstanbul. Günay, R. (2002). Geleneksel Ahşap Yapılar Sorunları ve Çözüm Yolları. Birsen Yayınevi, İstanbul. Küçükkaya, A.G. (2004). Taşların Bozulma Nedenleri Koruma Yöntemleri, Birsen Yayınevi, İstanbul. Sevük, F. (2001). Yapı Hasarları ve Hasarların İyileştirilmesi Üzerine Bir İnceleme, Doktora Tezi, Y.T.Ü., İstanbul. Toydemir, N., Gürdal, E., Tanaçan, L. (2000). Yapı Elemanı Tasarımında Malzeme, Literatür Yayıncılık, İstanbul. Weaver, E., Matero, F.G. (1997). Conserving Buildings Guide To Technıques And Materials. John Wiley & Sons Inc., US.
23	Assesment	

TERM LEARNING ACTIVITIES	**NUMBER**	**WEIGHT**
Midterm Exam	1	20.00
Quiz	0	0.00
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	When the number of students is below 20, absolute evaluation is applied, and when the number of students is above 20, the relative evaluation system is used. Course success is evaluated through the midterm exam (test), final exam (test) and homework.

24 ECTS / WORK LOAD TABLE

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	2.00	28.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	14	2.00	28.00
Homeworks	1	20.00	20.00
Projects	0	0.00	0.00
Field Studies	4	2.00	8.00
Midterm exams	1	3.00	3.00
Others	0	0.00	0.00
Final Exams	1	3.00	3.00
Total Work Load			93.00
Total work load/ 30 hr			3.00
ECTS Credit of the Course			3.00

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	5	5	3	0	3	0	0	0	0	0	5	0	0	0	0	0
ÖK2	5	5	3	0	5	0	0	0	0	0	5	0	0	0	0	0
ÖK3	5	5	3	0	3	0	0	0	0	5	5	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**