

PROBLEMS IN BUILDING PHYSICS

1	Course Title:	PROBLEMS IN BUILDING PHYSICS
2	Course Code:	MIM6010
3	Type of Course:	Optional
4	Level of Course:	Third Cycle
5	Year of Study:	2
6	Semester:	4
7	ECTS Credits Allocated:	6.00
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. FİLİZ ŞENKAL SEZER
15	Course Lecturers:	
16	Contact information of the Course Coordinator:	filizs@uludag.edu.tr Tel: 02242942126 Bursa Uludağ Üniversitesi Mimarlık Fakültesi Mimarlık Bölümü
17	Website:	
18	Objective of the Course:	This course aims to take measures to ensure comforts provisions so that people can be healthy and productive in their living quarters and to teach the environmental control criteria for the planning and construction phases of a building. The aim of this course is to give information about building physics problems in buildings (thermal, acoustical, physic-chemical problems; corrosion, fire, sun and radiation effects, moldiness and analysis of the damage formations with the effect of water and moisture at building). It also aims to emphasize the importance of thermal, acoustical and physic-chemical problems in buildings for building and human health and give information about building physics principles. This course has fundamental knowledge about optimum details for structure shell.
19	Contribution of the Course to Professional Development:	This course contributes to professional development in correct architectural practices by ensuring the recognition of building physics conditions.
20	Learning Outcomes:	
	1	To be dominated by the concept of building physics, to have specialized knowledge about the building physics problems
	2	To know the appropriate solutions and precautions in the face of the building physics problems, to offer the correct solutions to these problems
	3	To contribute to the development of knowledge in the literature by making high-quality works based on original research.
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21	Course Content:		
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Week	Theoretical	Practice	
1	The concept of building physics. Analysis of the building physics for people to be healthy and productive in their living quarters, in the context of comfort conditions.		
2	To determine the problems of building physics and investigations of the measures for providing optimal building physics conditions		
3	Readings about the building physics problems, discussion.		
4	Mechanical effects and building physics problems, proposals for solutions.		
5	Determination of water and moisture related problems in buildings, water proofing applications - recommendations in detail.		
6	Thermal problems, proposals for solutions.		
7	Homework Presentation (year-to)		
8	Sound effect, visual problems, and solutions.		
9	Lighting and lighting problems, solutions.		
10	Physic-chemical problems in buildings and proposals for solutions.		
11	Sample analysis: damage assessment, measures, solutions.		
12	Sample analysis: damage assessment, measures, solutions.		
13	Measures to be taken to the problems of building physics, details on optimal building envelope.		
14	Homework Presentation (year-end)		
22	Textbooks, References and/or Other Materials:	ERİÇ, M., 1994, "Yapı Fiziği ve Malzemesi", (Building Physics and Materials), Literatür Yayınları, İstanbul. TS 825 (2008) "Binalarda Isı Yalıtım Kuralları", Mecburi Standart Tebliği, Ankara Energy and Buildings (Journal Series) Building and Environment (Journal Series) Journal of Building Physics (Journal Series)	
23	Assesment		
TERM LEARNING ACTIVITIES		NUMBE R	WEIGHT
Midterm Exam		0	0.00
Quiz		0	0.00
Home work-project		2	40.00
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	Midterm exam, final exam and number of applications, homework success is not success.

24 ECTS / WORK LOAD TABLE

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	11	3.00	33.00
Homeworks	2	40.00	80.00
Projects	0	0.00	0.00
Field Studies	1	24.00	24.00
Midterm exams	0	0.00	0.00
Others	0	0.00	0.00
Final Exams	1	1.00	1.00
Total Work Load			180.00
Total work load/ 30 hr			6.00
ECTS Credit of the Course			6.00

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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	4	5	4	4	4	0	0	0	3	0	0	0	0	0	0
ÖK2	4	4	5	4	4	4	0	0	0	3	0	0	0	0	0	0
ÖK3	0	0	0	0	0	0	0	5	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
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