

BUILDING PHYSICS

1	Course Title:	BUILDING PHYSICS
2	Course Code:	MIM3003
3	Type of Course:	Compulsory
4	Level of Course:	First Cycle
5	Year of Study:	3
6	Semester:	5
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:	Prof. Dr. FILİZ ŞENKAL SEZER
15	Course Lecturers:	
16	Contact information of the Course Coordinator:	filizss@gmail.com, Tel: 0. 224. 2942126 Uludağ Üniversitesi Müh.- Mim. Fak. Mimarlık Bölümü
17	Website:	
18	Objective of the Course:	This course has fundamental knowledge about concept of physical environment and elements of building physics. The aim of this course is to give information about thermal comfort, heat insulation, humidity and condensation, sound insulation, noise control and lighting (natural and artificial light sources). 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. It also aims to teach how to take measures to ensure comfort provisions in people's living quarters for a healthy and productive life.
19	Contribution of the Course to Professional Development:	
20	Learning Outcomes:	
	1	To recognize the concept of building physics
	2	To have knowledge about building physics problems
	3	To know the measures and appropriate solutions against building physics problems
	4	To gain research skills, teamwork skills, speaking and writing skills, graphic skills to work, ability to benefit from the examples and critical thinking skills
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21	Course Content:	

	Course Content:				
Week	Theoretical		Practice		
1	The aim and the scope of the course: Building Physics Mechanical effects and building physics problems, mechanical deformations and material selection				
2	Mechanical effects and building physics problems, mechanical deformations and material selection				
3	Thermal conductivity, thermal comfort and factors of affecting the thermal comfort				
4	The importance of thermal insulation and energy savings, measures against heat loss in buildings, insulation applications				
5	Insulating materials and their properties				
6	Heat loss calculation on the walls (TS 825)				
7	Midterm exam and Course review				
8	Effect of water-humidity and building physics problems, condensation control				
9	Account of transpiration and condensation control in different wall sections				
10	Sound effects in buildings and building physics				
Activites			Number	Duration (hour)	Total Work Load (hour)
11	Theoretical Calculation of permeability values of sound in building materials		14	2.00	28.00
Practicals/Labs			0	0.00	0.00
12	Self-study Physics-practical effects and building physics		13	3.00	39.00
Homeworks			1	15.00	15.00
13	Projects mistakes and venues in terms of building physics in constructions, Presentation of		0	0.00	0.00
Field Studies			0	0.00	0.00
Midterm exams			1	2.00	2.00
14	Light and sound control in architecture		1	6.00	6.00
Others			1	2.00	2.00
Final Exams			1	2.00	2.00
Total Work Load					94.00
Total work load/ 30 hr			Physics and Materials), Literatür Yayınları, İstanbul. KARAKOC H ve BİNYIL DİZ E ve TURAN Ö 1999 3.07		
ECTS Credit of the Course					3.00
			No: G 20, İstanbul. Yalıtım Dergisi (Insulation Magazine)(periodicals)		
23	Assesment				
TERM LEARNING ACTIVITIES		NUMBE R	WEIGHT		
Midterm Exam		1	30.00		
Quiz		0	0.00		
Home work-project		1	10.00		
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	
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	5	4	3	2	3	0	3	0	3	3	3	0	0	0	0	0
ÖK2	5	4	3	2	3	0	3	0	3	3	3	0	0	0	0	0
ÖK3	5	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK4	0	0	0	0	0	0	3	0	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			