

TOROS ÜNİVERSİTESİ

Faculty Of Fine Arts, Design And Architecture
Architecture

Course Information

ENVIRONMENTAL CONTROL I					
Code	Semester	Theoretical	Practice	National Credit	ECTS Credit
		Hour / Week			
ARC241	Fall	2	0	2	2

Prerequisites and co-requisites	NONE
Language of instruction	Turkish
Type	Required
Level of Course	Bachelor's
Lecturer	Assist. Prof. H. Fikret OKUTUCU
Mode of Delivery	Face to Face
Suggested Subject	
Professional practise (internship)	None
Objectives of the Course	The basic principles of the physical environment control by transferring to human health provision for the establishment of appropriate healthy building and settlement
Contents of the Course	The transfer of the principles of making the nature (sun, wind, earthquake, etc.) beneficial to the people who will use the building through the designed building

Learning Outcomes of Course

#	Learning Outcomes
1	Grasping the close relations of physical environment conditions with laws of nature
2	Understanding that creating building laws compatible with laws of nature is related to environmental conservation.
3	Understanding the positive impacts of controlling the sun, as it is one of the most physical environmental data on the building's energy consumption.
4	Understanding the systems that prevent ground humidity which causes the most devastating damage to structure.

Course Syllabus

#	Subjects	Teaching Methods and Technics
1	Course introduction, description of the subject Perception	Lectures
2	Explanation of window maritime expression, importance, examination of details	Lectures
3	Drawings of window maritime expression, importance, examination of details	Lectures-Practice
4	Earthquake safe gypsum cardboard partition walls and brick walls	Lectures
5	Architectural drawing of earthquake safe gypsum cardboard partition walls	Lectures-Practice
6	Architectural drawing of earthquake safe brick walls	Lectures
7	Explanation of dilatation, joint and fusion terms and examples	Lectures-Practice
8	Mid-term exam	
9	Theoretical explanation of sun control	Lectures-Practice
10	External blinds explanation and architectural drawings	Lectures
11	Architectural drawings of shading devices and their sizing principles	Lectures-Practice
12	Winter garden (greenhouse) expression on the floor	Lectures

13	Drawings about winter garden (greenhouse) expression on the floor	Lectures-Practice
14	Main principles of moisture and vapor isolation on terrace roofs and achitectural drawings	Lectures
15	Preparation for final exam	Lectures-Practice
16	Final Exam	

Course Syllabus

#	Material / Resources	Information About Resources	Reference / Recommended Resources
1	" Cottom-Wirslow, M., (1990). "Environmental Design: The Best Architecture and Technology". PBC. Brookes, A.J., (1990). "The Building Envelope". Butterwith Architecture. Berköz, E. (1983). "Güneş Işınımı ve Yapı Dizaynı", Profesörlük Tezi. İTÜ Mimarlık Fakültesi Yayınları. Özkaya, M. (1972). "Aydınlatma Tekniği" . İTÜ Matbaası. - "		

Method of Assessment

#	Weight	Work Type	Work Title
1	20%	Mid-Term Exam	Mid-Term Exam
2	20%	Mid-Term Practise	Mid-Term Practise
3	60%	Final Exam	Final Exam

Relationship between Learning Outcomes of Course and Program Outcomes

#	Learning Outcomes	Program Outcomes	Method of Assessment
1	Grasping the close relations of physical environment conditions with laws of nature	1,4	1,2,3
2	Understanding that creating building laws compatible with laws of nature is related to environmental conservation.	3,11	1,2,3
3	Understanding the positive impacts of controlling the sun, as it is one of the most physical environmental data on the building's energy consumption.	3,18	1,2,3
4	Understanding the systems that prevent ground humidity which causes the most devastating damage to structure.	11	1,2,3

PS. The numbers, which are shown in the column Method of Assessment, presents the methods shown in the previous table, titled as Method of Assessment.

Work Load Details

#	Type of Work	Quantity	Time (Hour)	Work Load
1	Course Duration	14	2	28
2	Course Duration Except Class (Preliminary Study, Enhancement)	14	1	14
3	Presentation and Seminar Preparation	0	0	0
4	Web Research, Library and Archival Work	0	0	0
5	Document/Information Listing	0	0	0
6	Workshop	0	0	0
7	Preparation for Midterm Exam	1	2	2
8	Midterm Exam	1	2	2
9	Quiz	0	0	0
10	Homework	7	1	7
11	Midterm Project	0	0	0
12	Midterm Exercise	1	2	2

13	Final Project	1	2	2
14	Final Exercise	0	0	0
15	Preparation for Final Exam	1	2	2
16	Final Exam	1	1	1
				60