

# TOROS ÜNİVERSİTESİ

Faculty Of Fine Arts, Design And Architecture  
Architecture

## Course Information

SUSTAINABLE DESIGN					
Code	Semester	Theoretical	Practice	National Credit	ECTS Credit
		Hour / Week			
ARC428	Spring	3	0	3	3

<b>Prerequisites and co-requisites</b>	None
<b>Language of instruction</b>	Turkish
<b>Type</b>	Elective
<b>Level of Course</b>	Bachelor's
<b>Lecturer</b>	Lect. Başak Yüncü
<b>Mode of Delivery</b>	Face to Face
<b>Suggested Subject</b>	None
<b>Professional practise ( internship )</b>	None
<b>Objectives of the Course</b>	The aim is to rise awareness among interior architecture students about sustainability and give a knowledge background which would be beneficial to work on eco-friendly projects when they graduate.
<b>Contents of the Course</b>	Sustainability, sustainable built environment, sustainable design criteria, cradle to gate and cradle to grave life cycle analysis, environmental product declarations, VOC emissions, indoor environmental quality, green building certificationa (LEED, BREEAM, Çedbik-Konut)

## Learning Outcomes of Course

#	Learning Outcomes
1	To get familiar with sustainability terminology in general
2	To select and use sustainable building materials in design proposals
3	To discuss about sustainable built environment
4	To read and discuss life cycle analysis of buildings and building materials
5	To read and compare environmental product declarations
6	To correlate VOC emissions and indoor environmental quality
7	To get familiar with green building certifications (LEED, BREEAM, Çedbik Konut)
8	To be aware of sustainable design criteria

## Course Syllabus

#	Subjects	Teaching Methods and Technics
1	Abstract - What is sustainability? Social, financial and environmental pillars of sustainability. Why do we need sustainability?	Oral and visual presentation
2	Sustainable design criteria	Oral and visual presentation
3	Sustainable design criteria	Oral and visual presentation
4	Sustainable built environment and green building certifications (LEED, BREEAM, ÇEDBİK-Konut): categories and system	Oral and visual presentation
5	Sustainable built environment and green building certifications (LEED, BREEAM, ÇEDBİK-Konut): categories and system	Oral and visual presentation

6	Materials for green buildings: Sustainable and low emitting construction materials	Oral and visual presentation
7	Review before mid-term exam	Oral and visual presentation
8	Mid-term examination - (written)	
9	"Cradle to gate" and "cradle to grave" life cycle assessment, environmental product declarations	Oral and visual presentation
10	"Cradle to gate" and "cradle to grave" life cycle assessment, environmental product declarations	Oral and visual presentation
11	"Cradle to gate" and "cradle to grave" life cycle assessment, environmental product declarations	Oral and visual presentation
12	Indoor environmental quality, VOC emissions, VOC testing	Oral and visual presentation
13	Indoor environmental quality, VOC emissions, VOC testing	Oral and visual presentation
14	Indoor environmental quality, VOC emissions, VOC testing	Oral and visual presentation
15	Pre-final review of the semester	Oral and visual presentation
16	Final Exam	

## Course Syllabus

#	Material / Resources	Information About Resources	Reference / Recommended Resources
1	EPD Rehberi, Saint-Gobain Rigips Alçı Sanayi ve Ticaret A.Ş., 2016		
2	Building Green: A Complete How-To Guide to Alternative Building Methods, Clarke Snell, Tim Callahan, 2005		
3	Hand Book of Green Building Design and Construction: LEED, BREEAM and Green Globes, Sam Kubba, 2012		

## Method of Assessment

#	Weight	Work Type	Work Title
1	20%	Mid-Term Exam	Mid-Term Exam
2	60%	Final Exam	Final Exam
3	5%	Homework	Homework
4	5%	Homework	Homework
5	5%	Homework	Homework
6	5%	Homework	Homework

## Relationship between Learning Outcomes of Course and Program Outcomes

#	Learning Outcomes	Program Outcomes	Method of Assessment
1	To get familiar with sustainability terminology in general	1,5,8	
2	To select and use sustainable building materials in design proposals	5,8,14	
3	To discuss about sustainable built environment	5	
4	To read and discuss life cycle analysis of buildings and building materials	5,8	
5	To read and compare environmental product declarations	5,14	
6	To correlate VOC emissions and indoor environmental quality	5,8	
7	To get familiar with green building certifications (LEED, BREEAM, Çedvik Konut)	1,3,5,8	
8	To be aware of sustainable design criteria	1,2,6,8,9,14	

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	3	42
2	Course Duration Except Class (Preliminary Study, Enhancement)	14	2	28
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	3	3
8	Midterm Exam	1	1	1
9	Quiz	0	0	0
10	Homework	4	3	12
11	Midterm Project	0	0	0
12	Midterm Exercise	0	0	0
13	Final Project	0	0	0
14	Final Exercise	0	0	0
15	Preparation for Final Exam	1	3	3
16	Final Exam	1	1	1
				<b>90</b>