

# TOROS ÜNİVERSİTESİ

Faculty Of Fine Arts, Design And Architecture  
Architecture

## Course Information

MECHANICAL SYSTEMS I					
Code	Semester	Theoretical	Practice	National Credit	ECTS Credit
		Hour / Week			
ARC 309	Fall	2	0	2	3

<b>Prerequisites and co-requisites</b>	None
<b>Language of instruction</b>	Turkish
<b>Type</b>	Required
<b>Level of Course</b>	Bachelor's
<b>Lecturer</b>	Teach.Asist. Tolga ÇOLAK
<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>	It is aimed to teach the principles of mechanical, electrical systems and its technical terminology as a professional communication system. It contains the automatic control systems, vertical access systems, the elevators, moving staircases (escalators), special cabins and systems designs, the moving spaces (such as wc, baths, kitchens, vs.) It contains also pre designings criteria about the mechanical systems. It is searched the effects of mechanical systems on the design decisions of interior architecture.
<b>Contents of the Course</b>	The general information about the principles and problems about the mechanical and electrical systems' materials, applications, details for the interior architecture practices.

## Learning Outcomes of Course

#	Learning Outcomes
1	Ventilation, lighting, installation problems for the sewage systems and solutions, some informations for to prevent problems.
2	To define the subject of energy, the various heating systems and its using and general informations about it
3	To describe the factors that caused the pollution inside the buildings, the information about the prevention and elimination systems of inside pollution, the general information about air conditioning systems.
4	To describe air channels and suspended ceilings connections.
5	To assess the lecture with visual materials.
6	To get the abilities to associate with the lectures

## Course Syllabus

#	Subjects	Teaching Methods and Technics
1	Reading the syllabus and general informations about the construction working schedule.	Lecture, Presentation
2	The methods for the applications and solutions of the sewage systems, central heating, heating systems' problems and its applications.	Lecture, Presentation
3	The methods for the problems and solutions about the fire systems applications.	Lecture, Presentation
4	The methods for the problems and its solutions about lighting, electrical and phone systems.	Lecture, Presentation
5	The methods for the problems and solutions about the data systems.	Lecture, Presentation
6	Technical trip to construction area.	Evaluation

7	The papers of students about the technical trip	Evaluation
8	Midterm exam.	
9	The ventilation and its methods of applications and solutions for problems.	Lecture, Presentation
10	The fires, fog's evacuations and its applications and methods of solutions for problems	Lecture, Presentation
11	The details of constructional implements and the problems of its applications and methods of solutions for its problems.	Lecture, Presentation
12	The details of constructional implements and the problems of its applications and methods of solutions for its problems.	Lecture, Presentation
13	The technical trip for construction.	Evaluation
14	The paper of students prepared for the technical trip	Evaluation
15	The discussion about the subjects for the final exam.	Evaluation
16	Final Exam	

## Course Syllabus

#	Material / Resources	Information About Resources	Reference / Recommended Resources
1	Şantiye el kitabı, Fevzi Akkaya Eğitim Vakfı Yayınları		
2	Alphan, A, Yapıda Sağlık Donatımı, İ.T.Ü. Matbaası, İstanbul, 1985		
3	Ernst Neufert, Yapı Tasarımı Genel Bilgileri, Güven Kitabevi, Ankara, 1997		
4	Ching, F.D.K., Adams, C.; John Wiley and Sons , Building Construction Illustrated, 2000.		
5	Structures. Schodek D.L Prentice Hall, 2000.		
6	web		

## Method of Assessment

#	Weight	Work Type	Work Title
1	40%	Mid-Term Exam	Mid-Term Exam
2	60%	Final Exam	Final Exam

## Relationship between Learning Outcomes of Course and Program Outcomes

#	Learning Outcomes	Program Outcomes	Method of Assessment
1	Ventilation, lighting, installation problems for the sewage systems and solutions, some informations for to prevent problems.	9	1,2
2	To define the subject of energy, the various heating systems and its using and general informations about it	3,9	1,2
3	To describe the factors that caused the pollution inside the buildings, the information about the prevention and elimination systems of inside pollution, the general information about air conditionning systems.	3,14	1,2
4	To describe air channels and suspended ceilings connections.	3,9	1,2
5	To assess the lecture with visual materials.	7	1,2
6	To get the abilities to associate with the lectures	1	1,2

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	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	8	8
8	Midterm Exam	1	1	1
9	Quiz	0	0	0
10	Homework	5	4	20
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	4	4
16	Final Exam	1	1	1
				<b>90</b>