TOROS ÜNİVERSİTESİ

Faculty Of Fıne Arts, Desıgn And Archıtecture
Archıtecture

Course Information

STRUCTURE II					
Code	**Semester**	**Theoretical**	**Practice**	**National Credit**	**ECTS Credit**
		Hour / Week			
ARC238	Spring	2	0	2	2

Prerequisites and co-requisites	STRUCTURE I
Language of instruction	Turkish
Type	Required
Level of Course	Bachelor's
Lecturer	Prof. Dr. Necati ŞEN
Mode of Delivery	Face to Face
Suggested Subject	
Professional practise (internship)	None
Objectives of the Course	Makes architecrtural students to gain ability of understand changes in existing buildings with the frame of basic content and structural design principles.It contributes developing creative ideas during 3d , spatial design process of design project of by understanding contents,abilities and extends of structure basicly.In addition by anaylses of successful buildings about structure systems provides students to gain ability of making synthesis and analysis.For students, this course will provide a positive method, by which he/she may rapidly acquire comprehensive and competent knowledge on all structures, comprehensive order of structures. Gaining ability of form analyses and making 3d models, students will design applications by investigating different spatial formal structural systems. Course also increases creativity of students during design projects period, solving 3d spatial structural systems.
Contents of the Course	In the content of cours ,weekly lectures will explained to students by power point presentaions visually.It is expected from students to make and design models and about given subjects on time.Models that are especially given for developing skills on 3d design,must be studied and developed by students.

Learning Outcomes of Course

#	Learning Outcomes
1	Introducing meaning at structure and architecture
2	Learning artificial and natural structures
3	Learning how to use various structural systems in designs
4	Learning various properties and classifications of structural systems
5	Producing various structural systems for solving a design project

Course Syllabus

#	Subjects	Teaching Methods and Technics
1	1.Introduction to the course,2.General repetition of last semester course contents,3.Introduction of new content: Vector Active Structure Systems.	Lecture
2	"1.Continuing to Vector-active Structure systems -Definition / Synopsis / Spans -Flat Trusses -Transmitted Flat Trusses -Curved Trusses -Space Trusses "	Lecture
3	"1.Introducing Section active Structure Systems subject -Definition / Synopsis / Operations -Deformation and Stabilization -Systems of Vertical Load Transfer -Examples of Typical Structure Forms -Elevation Geometries "	

4	"1.Introducing Surface Active Structure systems. -Definition / Synopsis / Spans -Plate Structures -Folded Plate Structures -Shell Structures *Cylindrical Shells *Dome Shells *Saddle Shells "	Lecture
5	1.Surface Active Structure Systems continues	Lecture
6	Surface Active Structure Systems continuing	Lecture
7	"1.Introducing Height-Active Structure Systems -Definition / Synopsis / Operations -Deformation and Stabilization - Systems of Vertical Load Transfer -Examples of Typical Structure Forms -Elevation Geometries "	Lecture
8	MIDTERM EXAM	
9	1.Pneumatic Structure Systems	Lecture
10	Cable systens and cable webs	Lecture
11	Modular coordination and standarts defination	Lecture
12	Doble level puneumatic structres	Lecture
13	One way and double ways long span structural systens	Lecture
14	Shell structures and HP, Conoid, space structures	Lecture
15	Geometry and Structural shape and Form researchs	Lecture
16	Final Exam	

Course Syllabus

#	Material / Resources	Information About Resources	Reference / Recommended Resources
1	Gerçek C., 'Yapıda Taşıyıcı Sistemler'		
2	Ching F. D.K., ' Çizimlerle Bina Yapım Rehberi '		
3	Engel H., 'Structure Systems' N.Şen,structure and structural thought in architecture		

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	Introducing meaning at structure and architecture	3,10	1,2
2	Learning artificial and natural structures	1,3,18	1,2
3	Learning how to use various structural systems in designs	10	1,2
4	Learning various properties and classifications of structural systems	10,18	1,2
5	Producing various structural systems for solving a design project	10	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	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	0	0	0
8	Midterm Exam	1	1	1
9	Quiz	0	0	0
10	Homework	4	4	16
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	0	0	0
16	Final Exam	1	1	1
				60