TOROS ÜNİVERSİTESİ

Faculty Of Fine Arts, Design And Architecture Architecture

Course Information

EARTHQUAKE RESISTANT DESIGN						
Code	Semester	Theoretical	Practice	National Credit	ECTS Credit	
		Hour / Week				
ARC436	Spring	2	0	2	3	

Prerequisites and co- requisites	None
Language of instruction	Turkish
Туре	Required
Level of Course	Bachelor's
Lecturer	Department Instructors
Mode of Delivery	Face to Face
Suggested Subject	None
Professional practise (internship)	None
Objectives of the Course	Convey the information and experiences that the buildings might be safer during an earthquake through architectural design/form itself.
Contents of the Course	What is an earthquake, Definition of Regulations on the Buildings in Disaster Areas, Concepts of Ordered Structure and Disordered Structure, Irregularities in Plan and Intersection Planes, Performances of Ordered Geometric Forms During an Earthquake, Benefits and Development Details of Earthquake Dilatations, Determination of Causes of Damages in Buildings damaged in an Earthquake through Examples, Acquisition of Earthquake-Proof Buildings through the Support of Technology-Definition of related Technologies

Learning Outcomes of Course

#	Learning Outcomes
1	At the end of this course, students will be able to apply consepts of 'Earthquake resistant design '
2	At the end of this course, students will be able to apply extensions of 'Earthquake resistant design ' .
3	At the end of this course, students, will be able to look from 'Earthquake and Design ' in terms of experiential dealings
4	At the end of this course, students, have ability for the self improvement about 'Earthquake resistant design '

Course Syllabus

#	Subjects	Teaching Methods and Technics
1	Contents and Objectives, What is an Earthquake, Evaluation of the Forms/Designs of Buildings Damaged in Large Earthquakes in Turkey and in the World.	Definition and basic introduction to thefield
2	Definition of the Philosophy of Regulations on Buildings on Disaster Areas and Expression of Sections associated with the Architectural Design through Shapes and Examples.	Reading: Guidelines for Use of thePrinciples of Universal Design(Guidelines for Use of the Principles ofUniversal Design)
3	Expression of the Regulation on Buildings in Disaster Areas, Ordered-Disordered Structures, Irregularities in Plan/Intersection, Significance Coefficients of Buildings through Examples.	Research: Resources on UniversalDesign
4	Determination by the Students of the Causes of Damages in Buildings damaged in an	Homework 1: Answering Questions onthe Course Webpage.

	Earthquake/Methods of Preventing the Development of Damage.	
5	Comparison of In-Situ Systems and Prefabricated Systems in terms of Earthquake Safety-Examination of the Support of Technology in this Respect.	Reading: The Universal Design File:Designing for People of All Ages andAbilities , UDF.12.98, Molly Story, JamesMueller, and Ron Mace, 1998, 164 pp.The Universal Design File discusses thehistory of universal design and providesexcellent illustrations of each principle.Seven indepth case studies are profiled.This book was the first comprehensivelook at the concept and application ofuniversal design in products and the builtenvironment.
6	Definition of Earthquake Isolators and Posttensioned- Ala-Sawa Construction Technology.	Reading: Toy Guide for Differently AbledKids (www.toysrus.com) * REPORTPROPOSAL SUBMISSION
7	Review of the Knowledge of Students on the Issue under the Question titled "What did we Learn in this Course?" and Preparations to the Mid-term Exam.	Reading: Housing for the Lifespan of AllPeople, HSUD.8.97, 1988, reprint 1994. This pamphlet provides an introduction to the concept of universal design and its application in the home. Universal designfeatures, applications, and designsolutions for the home are included.
8	Mid-term Exam.	
9	Review of Answers to Mid-term Exam Questions. Introduction of Project/Assay	Homework 2: Answering Questionsonthe Course Webpage. Reading: CaseStudies on Universal Design,CSUD.5.98, 1998, 65+ pp. 14 casestudies, which describe universal designsolutions and demonstrate successfulintroductions of universal design in themarketplace are included in this book. The case studies illustrate one or moreof the seven Principles of UniversalDesign developed under the direction of The Center for Universal Design.
10	Reconsideration of the Architectural Designs of Students performed in Previous Semester through their Knowledge in terms of Earthquake-proof Building Designs-Designing-Arranging the Same or Performing a New Issue Selected through Workshop Study through the Principles of Earthquake-Proof Design.	Reading: Case Studies on UniversalDesign, CSUD.5.98, 1998, 65+ pp. 14case studies, which describe universaldesign solutions and demonstratesuccessful introductions of universaldesign in the marketplace are included inthis book. The case studies illustrate oneor more of the seven Principles ofUniversal Design developed under thedirection of The Center for UniversalDesign.
11	Continuation of the Issue Studied in Week 10.	Reading: Reading: Case Studies on Universal Design, CSUD.5.98, 1998,65+ pp. 14 case studies, which describe universal design solutions and demonstrate successful introductions of universal design in the market place are included in this book. The case studies illustrate one or more of the sevenPrinciples of Universal Design developedunder the direction of The Center fo
12	Continuation of the Issue Studied in Week 10.	* POSTER SUBMISSION
13	Continuation of the Issue Studied in Week 10.	Definition and basic introduction to the field
14	Delivering the Issue started in Week 10 in the format of Project/Assay consisting of the Preface, Report, Plan, Intersection, Two Details.	Reading: Guidelines for Use of the Principles of Universal Design (Guidelines for Use of the Principles ofUniversal Design)
15	Semester Revision	Research: Resources on Universal Design
16	Final Exam	

Course Syllabus

#	Material / Resources	Information About Resources	Reference / Recommended Resources
1	Semih S. Tezcan (1998). Journal of an Architect. Türkiye Deprem Vakfı Yayınları. İstanbul,		
2	E. Erman (2002). Earthquakes and Earthquake-Proof Architectural Design. Faculty of Architecture, Middle East Technical University. 975-429-197-7		
3	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	At the end of this course, students will be able to apply consepts of 'Earthquake resistant design '	3,10	1,2
2	At the end of this course, students will be able to apply extensions of 'Earthquake resistant design ' .	3,10	1,2
3	At the end of this course, students, will be able to look from 'Earthquake and Design ' in terms of experiential dealings	13	1,2
4	At the end of this course, students, have ability for the self improvement about 'Earthquake resistant design '	1,3,13	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	5	5
8	Midterm Exam	1	2	2
9	Quiz	0	0	0
10	Homework	4	5	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	5	5
16	Final Exam	1	2	2
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