

Course Information					
Course Title	Code	Semester	L+P Hour	Credits	ECTS
Disaster and Shelter - Research & Design	ARCH 562	Fall	3 + 0	3	7

Prerequisites	-
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Language of Instruction	English
Course Level	Master Program
Course Type	Elective
Course Coordinator	Assist. Prof. Dr. Faruk Can Ünal
Instructors	Assist. Prof. Dr. Faruk Can Ünal
Assistants	
Goals	Comprehension of post-disaster environment as a context for architecture, and understanding of shelter design principles are expected in this course.
Content	It is aimed to comprehend the fundamental necessities that are needed in emergency shelters for natural or man-made disasters. As in many different locations around the world, Turkey is also open to exposure to disasters. Therefore, it is important to develop design solutions that can be used in post-disaster environments. It is expected that shelter design will be developed in the context of individual scenarios through researches.

Learning Outcomes	Program Learning Outcomes	Teaching Methods	Assessment Methods
Capability to conduct an assessment and presentation on post-disaster environment as an architectural project location	3, 5, 6, 8, 15	1, 2, 3, 4, 5, 6	B, C
Ability to analyze pre-fabricated architectural structures in regard to production methods, design and performance	3, 5, 6, 8, 15	1, 2, 3, 4, 5, 6	B, C
Ability to conduct and present a visual analysis on the design principles of post-disaster shelters	3, 5, 6, 8, 15	1, 2, 3, 4, 5, 6	B, C
Capability to conduct an assessment and presentation on light structures	3, 5, 6, 8, 15	1, 2, 3, 4, 5, 6	B, C

Teaching Methods:	1: Lecture, 2: Question-Answer, 3: Discussion, 4: Seminar, 5: Project, 6: Teamwork; 7: Technical excursion
Assessment Methods:	A: Testing, B: Jury, C: Homework, D: Quiz

COURSE CONTENT		
Week	Topics	Study Materials
1	Introduction to Disaster and Shelter	
2	Post-disaster environment as a context for architecture	
3	Shelter design principles and concepts in architecture	
4	Post-disaster shelter measures : planning, application (international)	
5	Post-disaster shelter measures : planning, application (national)	
6	Light Structures	
7	Student Research Presentations	
8	Data Analysis and interpretation for the given site	
9	Post-Earthquake Settlement Proposals for the given site	
10	Post-Earthquake Shelter Design Proposals for the given site	
11	Student Project Presentations & Critics	
12	Student Project Presentations & Critics	
13	Student Project Presentations & Critics	
14	Student Project Presentations & Critics	

RECOMMENDED SOURCES	
Textbook	Kronenburg R., Portable Architecture, Birkhaeuser Architecture, 2008
Additional Resources	Siegal J., Mobile: The Art of Portable Architecture, Princeton Architectural Press, 2002 Siegal J., Mobile: The Art of Portable Architecture, Princeton Architectural Press, 2002

MATERIAL SHARING

Documents	Presentations
Documents	Presentations
Exams	

ASSESSMENT		
IN-TERM STUDIES	NUMBER	PERCENTAGE
Mid-terms		
Quizzes		
Project		
Seminar and presentation	2	40
Assignment		
Final	1	60
Total		100
CONTRIBUTION OF FINAL EXAMINATION TO OVERALL GRADE		60
CONTRIBUTION OF IN-TERM STUDIES TO OVERALL GRADE		40
Total		100

COURSE CATEGORY	Expertise/Field Courses
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COURSE'S CONTRIBUTION TO PROGRAM						
No	Program Learning Outcomes	Contribution				
		1	2	3	4	5
1	Acquires knowledge of and comprehends socio-economic and spatial elements, and processes which necessitates urban design and also involves outputs of design projects.					
2	Has the competence for producing a comprehensive architectural project from the beginning of schematic design to detailed system development phase (structural and environmental systems, safety and fire protection, partition systems, building envelop, building service systems).					
3	Has the ability to employ the experience gained from architectural building to new fields and generate strategies.				x	
4	Has the knowledge of approaches, models and techniques which will improve the efficiency in managerial tasks and management of a architectural project and construction.					
5	Has the knowledge of principles of the modern load-bearing systems and application methods.				x	

6	Has the ability to transfer and apply architectural knowledge to design and application processes.								x
7	Has the ability to employ theoretical and practical field-related knowledge with reference to their undergraduate competence.								
8	Has the ability to conduct research, evaluate, make critical analysis, employ appropriate techniques and reach unique results.								
9	Has the competence of relating to project and construction processes, analyzing and evaluating within the framework of architectural structure.								
10	Has the competence of taking strategic decisions of an architectural project and generating unique architectural solutions.								
11	Has the competence of systematically presenting a work- carried out individually or as a group work- visually, orally and in written by employing required computer programs.								
12	Has the knowledge of relation of urban design with architecture and other fields of expertise.								
13	Has the ability to prepare urban design project and/ or research by employing his/her knowledge and generating new methods and ideas.								
14	Has the ability to include socio-economic and spatial criteria into design process.								
15	Has the ability to conduct research, acquire knowledge, make analysis and synthesis, and use those for unique outputs.								
16	Has the competence of managing a project in urban design field individually.								
17	Has the competence of conducting a unique academic/ scientific study, presenting it and discussing it on a dialectic basis.								

ECTS ALLOCATED BASED ON STUDENT WORKLOAD BY THE COURSE DESCRIPTION			
Activities	Quantity	Duration (Hour)	Total Workload (Hour)
Course Duration (Including the exam week: 14 x Total course hours)	14	3	42
Hours for off-the-classroom study (Pre-study, practice)	14	4	56
Mid-terms			
Quizzes			
Project	4	10	40
Seminar and presentation	2	16	32
Assignment			
Final examination	1	3	3
Total Work Load			173
Total Work Load / 25			6.92

ECTS Credit of the Course			7
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