

School/Faculty/Institute	Faculty of Arts, Design and Architecture		
Program	B. Arch. in Architecture	Required	
Semester	Spring		

Course Code	ARC 202		
Course Title in English	Architectural Design 4		
Course Title in Turkish	Mimari Tasarım 4		
Language of Instruction	English		
Type of Course	Studio		
Level of Course	Undergraduate		
Semester	Fall		
Contact Hours per Week	Lecture:	Recitation:	Lab: Studio: 12
Estimated Student Workload	298 hours per semester.		
Number of Credits	12 ECTS		
Grading Mode	Standard Letter Grade		
Pre-requisites	ARC 201		
Expected Prior Knowledge	None		
Co-requisites	None		
Registration Restrictions	Only Undergraduate Students		
Overall Educational Objective	The studio focuses on designing environments in a complex urban context. The development of contextual analysis encompassing social, physical, economic, political aspects of a given area is emphasized. Students are required to develop personal interpretations of their sites and to convert them into individual programs.		
Course Description	The studio is conducted in coordination with Architectural Technology III, with a focus on the environmental forces and the ways of modifying them in a sensible fashion for the creation of places and buildings that are both emotionally lifting and environmentally resilient. The projects the students design in the studio will investigate new experiences through developing novel and personal architectural programs.		
Course Description in Turkish	Proje dersi Mimarlık Teknolojileri II dersi ile koordineli olarak yürütülmekte, her iki derste de çevre verilerine odaklanılmakta ve bunların anlamlı ve duyarlı bir şekilde dönüştürülerek duygusal olarak etkileyici ve sürdürülebilir ortam ve binaların ortaya çıkarılmasında kullanılmasına odaklanılmaktadır. Öğrencilerin tasarlayacağı projeler yapılı çevre ile mekan deneyimi arasındaki ilişkiyi araştırmak üzere kurgulanacaktır. Öğrenciler, bir mahallede yaşayan kişilerin gereksinmelerine dayalı bir mimari program geliştirme tecrübesi de kazanacaklardır.		
Course Learning Outcomes and Competences	Upon successful completion of the course, the learner is expected to be able to: <ol style="list-style-type: none"> 1. Ability to record and visualize environmental properties. 2. Ability to incorporate different data into an architectural design. 3. Develop an understanding of various needs of people and the ability to transform those into an architectural program. 4. Ability to apply basic architectural and urban design principles in accordance with data such as climate, users, place, cultural context and social issues in order to create novel architectural solutions. 5. Understanding of the effect of materials on architectural design. 		
Relation to Program Outcomes and Competences:	N=None	S=Supportive	H=Highly Related

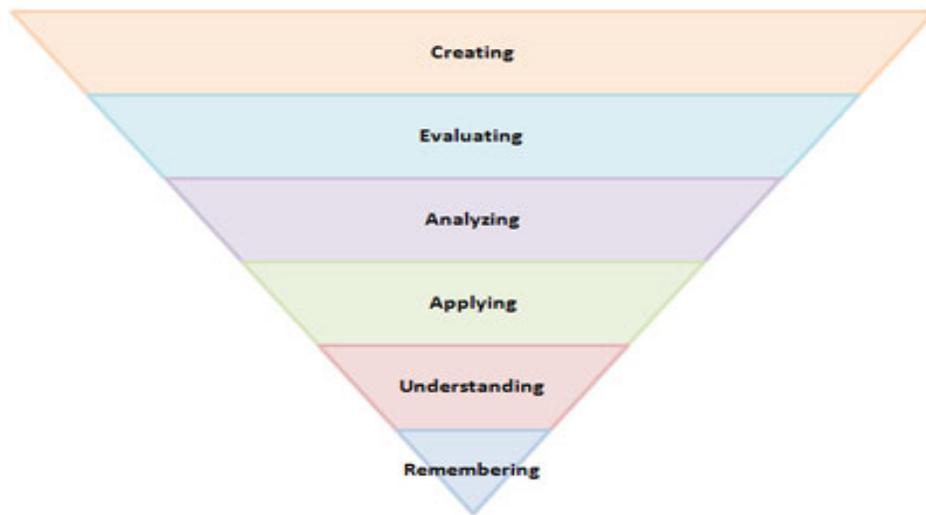
Program Outcomes and Competences	Level	Assessed by
	N/S/H	Exam, HW, Seminar.
1. Ability to read, write and speak effectively in Turkish and English, equivalent to a B2 European Language Passport Level in English.	S	
2. Ability to question and interpret ideas considering diverse points of view; gather and use data, develop concepts related to people, places and the environment, and make individual decisions.	S	
3. Ability to use appropriate graphical methods including freehand and digital drawing techniques, (ECDL advanced) in order to develop ideas in addition to communicate the process of design.	H	Projects, Seminars
4. Ability to use fundamental principles of architectural design considering the place, climate, people, society as factors, and simultaneously express present principles in relevant precedents.	S	
5. Understanding of architectural principles belonging to global and local cultures shaped by the climatic, technological, socioeconomic, cultural factors, in addition to principles of historic preservation while developing architectural and urban design projects.	H	Projects, Seminars
6. Understanding the theories and methods used to describe the relationship between human behavior and physical environment; and concurrently understanding different needs, values, behavioral norms, social and spatial patterns of different cultures.	H	Projects, Seminars
7. Ability to apply various stages of design processes considering the client and user needs, which include space and equipment requirements besides site conditions and relevant laws and standards.	N	
8. Understanding the role of applied research in determining function, form and systems and their impact on human conditions and behavior.	S	
9. Understanding of the basic principles of static and dynamic structural behavior that withstand gravity and lateral forces, in addition to the evolution and applications of structural systems.	S	
10. Ability to apply the principles of sustainability in architectural and urban design projects that aim to preserve the natural and historic resources and provide healthful environments.	S	
11. Ability to apply the fundamental principles of building and safety systems such as mechanical, electrical, fire prevention, vertical circulation additionally to principles of accessibility into the design of buildings.	N	
12. Understanding the basic principles in the selection of materials, products, components and assemblies, based on their characteristics together with their performance, including their environmental impact and reuse possibilities.	H	
13. Ability to produce a comprehensive architectural project from the schematic design phase to design development phase, while integrating structural systems, life safety and sustainability principles.	N	
14. Understanding the principles of environmental systems such as energy preservation, active and passive heating and cooling systems, air quality, solar orientation, day lighting and artificial illumination, and acoustics; in addition to the use of appropriate performance assessment tools.	N	
15. Ability to choose appropriate materials, products and components in the implementation of design building envelope systems.	N	
16. Ability to understand the principles and concepts of different fields in multidisciplinary design processes and the ability to work in collaboration with others as a member of the design team.	N	
17. Understanding the responsibility of the architect to organize and lead design and construction processes considering the environmental, social and aesthetic issues of the society.	N	
18. Understanding the legal to responsibilities of the architect of the architect effecting the design and construction of a building such as public health and safety; accessibility, preservation, building codes and regulations as well as user rights.	N	
19. Ability to understand the ethical issues involved in the design and construction of buildings and provide services for the benefit of the society. In addition to the ability to act with social responsibility in global and local scales that contribute to the well being of the society.	S	
20. Understanding the methods for competing for commissions, selecting consultants and assembling teams, recommending project delivery methods, which involve financial management and business planning, time management, risk management, mediation and arbitration.	N	
Name of Instructor	Asst. Prof. Dr. Frederico Fialho	

Course Contents	Week	Topic
	1.	Project 1 – Introduction to the studio and the 1 st project.
	2.	Project 1
	3.	
	4.	
	5.	
	6.	Project 1 – Review
	7.	Project 2 – Introduction to the 2 nd project - Integration with ARC 231
	8.	Integration with ARC 231
	9.	
	10.	
	11.	
	12.	
	13.	Integration with ARC 231
	14.	Project 2 – Review
Required/Recommended Readings	Recommended Reading: Rasmussen, S (1964) Experiencing architecture. The MIT Press, Massachusetts. Borden, G (2014) Process : material and representation in architecture. Routledge, New York. Borden, G (1989) Design strategies in architecture: an approach to the analysis of form. Van Nostrand Reinhold, Amsterdam. Borden, G (1977) The dynamics of architectural form: based on the 1975 Mary Duke Biddle lectures at the Cooper Union. Univ of California Press, Los Angeles. Garcia, M (2010) The diagrams of architecture. Wiley, London. <i>Required readings for each week will be posted on Blackboard.</i>	
Teaching Methods	The studio is conducted in coordination with Architectural Technology II course. Environmental concepts, ways and methods of gathering and visualizing data, impact of materials and structures will be discussed in both courses. Thus, the students will be using their own designs in the Architectural Technology II course allowing them to better understand and apply those principles. The studio emphasizes individual initiative and responsibility. Students are expected to develop architectural ideas and develop them through the mentorship of the studio instructors.	
Homework and Projects	2 projects, 2 seminars	
Laboratory Work	-	
Computer Use	Yes	
Other Activities	Field Trips	
Assessment Methods	1. Performance in studio: 60 points 2. Seminars: 20 points 3. Final Submissions: 20 points (stands for final examination)	
Course Administration	Office: Arda Inceoğlu, Sevince Bayrak: Block A, Floor5, Email: arda.inceoglu@mef.edu.tr Student participation will be essential for the design studio. Attending both submissions including the Final Submission are crucial elements in the final grade. Late submissions will not be accepted. 80% attendance is compulsory for a successful outcome.	

ECTS Student Workload Estimation	Activity	No/Weeks	Hours			Calculation	Explanation
		No/Weeks per Semester (A)	Preparing for the Activity (B)	Spent in the Activity Itself (C)	Completing the Activity Requirements (D)		
	Lecture	0	0	0	0	0	A*(B+C+D)
Lab etc.					0		
Midterm(s)	0	0	0	0	0	A*(B+C+D)	
Assingment, Project, Presentation	14	4	12	4	280	A*(B+C+D)	
Final Examination	1	8	8	0	16	A*(B+C+D)	
Total Workload					296		
Total Workload/25					11,84		
ECTS					12		

Key verbs for cognitive domain in writing learning outcomes and competences:

Bloom's Taxonomy



Revised edition by Lorin Anderson (a student of Bloom)

Key Verbs:

Remembering: defines, describes, identifies, knows, labels, lists, matches, names, outlines, recalls, recognizes, reproduces, selects, states.

Understanding: comprehends, converts, defends, distinguishes, estimates, explains, extends, generalizes, gives an example, infers, interprets, paraphrases, predicts, rewrites, summarizes, translates.

Applying: applies, changes, computes, constructs, demonstrates, discovers, manipulates, modifies, operates, predicts, prepares, produces, relates, shows, solves, uses.

Analyzing: analyzes, breaks down, compares, contrasts, diagrams, deconstructs, differentiates, discriminates, distinguishes, identifies, illustrates, infers, outlines, relates, selects, separates.

Evaluating: appraises, compares, concludes, contrasts, criticizes, critiques, defends, describes, discriminates, evaluates, explains, interprets, justifies, relates, summarizes, supports.

Creating: categorizes, combines, compiles, composes, creates, devises, designs, explains, generates, modifies, organizes, plans, rearranges, reconstructs, relates, reorganizes, revises, rewrites, summarizes, tells, writes.

Key verbs for affective domain in writing learning outcomes and competences:

Receiving Phenomena: asks, chooses, describes, follows, gives, holds, identifies, locates, names, points to, selects, sits, erects, replies, uses.

Responding to Phenomena: answers, assists, aids, complies, conforms, discusses, greets, helps, labels, performs, practices, presents, reads, recites, reports, selects, tells, writes.

Valuing: completes, demonstrates, differentiates, explains, follows, forms, initiates, invites, joins, justifies, proposes, reads, reports, selects, shares, studies, works.

Organizing: adheres, alters, arranges, combines, compares, completes, defends, explains, formulates, generalizes, identifies, integrates, modifies, orders, organizes, prepares, relates, synthesizes.

Internalizing values: acts, discriminates, displays, influences, listens, modifies, performs, practices, proposes, qualifies, questions, revises, serves, solves, verifies.