

FACULTY OF
ARCHITECTURE

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MIM-SBP-PEM

tes121e

PROJECT II

Section 5

2022-2023 spring
monday - thursday 08:30-12:30

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Syllabus

PROJECT II

COURSE DESCRIPTION AND PURPOSE The Project II course provides student the skills to research, analyze, plan and design while taking into regard the relation between humans, nature, culture, environment and function. Thinking critically, analyzing the urban fabric, conceptualizing, and interpreting as well as defining and solving functional and structural problems are key in this studio.

The main objective is to enable students to perceive, investigate, interpret, and analyze the relations humans have to space, to objects (products), and to the environment, in terms of both nature and culture, to develop and to increase the abilities and knowledge related to techniques and methods. By the end of the course, students will be able to develop design alternatives in relation with form, function and space in planning and design process.

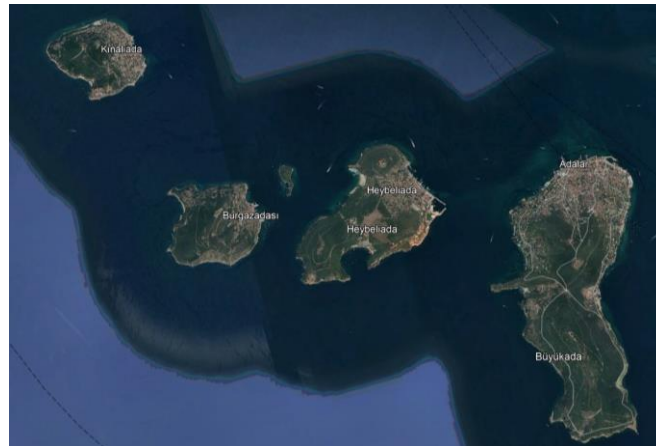
COURSE CONTENT This course consists of 2 modules. The assessment of each module is executed separately. The projects are expected to touch to the complementary themes (place, culture, parameters of design / structure, function, parametric design methods, etc.). The two modules provide a common ground for the students of faculty of architecture (architecture, urban and regional planning, landscape architecture departments) to explore and exchange ideas, skills and knowledge. In the entire module, the students will gain skills in developing design alternatives in relation with the natural, cultural and conceptual context and by taking into consideration the structural, material, construction parameters related to the scale of design. These projects enable students to understand the relationships between spatial structure, environment, function and culture.

Other activities such as trips, lectures, seminars, juries are considered to support ongoing projects during the semester. The outcomes of these activities are exhibited in colloquium at the end of the semester. The participation to these outings and other activities are mandatory.

MODULE 1 | WEEKS 1-7

ARCHIPELAGO EXPERIMENTS: Pattern Language of Traditional Settlements

In this module we will explore different urban patterns and similarities or differences among them in relation with the socio-cultural and geographical changes. The main task of the module is analyzing spatial pattern from different perspectives and scales mainly from the perspectives of architecture, planning and landscape architecture disciplines and nature-society-architecture-urban pattern interactions.

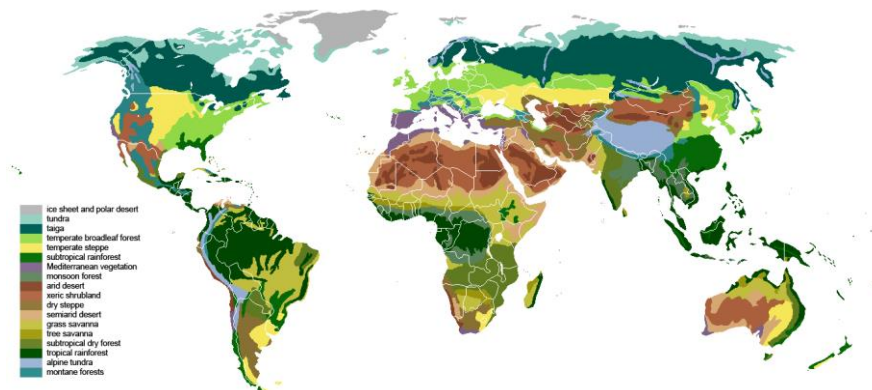


Istanbul's Princes' Islands - Princes' Archipelago- which are traditional settlements with their unique character, are selected as study areas for this module. The four islands, Büyükada, Heybeliada, Burgazada and Kınalıada, representing four different socio-cultural and spatial organization forms, will be explored in terms of architecture, urban space and public spaces, environment and landscape and everyday life.

MODULE 2 | WEEKS 9-15

DESIGN 4 EXTREMES

The main task of the module 2 is designing a small architectural unit that is adapted to the selected harsh environment in the world.



The effects of extreme environmental conditions on architectural space and passive climatization techniques will be main factors in designing the shelter.

COURSE LEARNING OUTCOMES

- (1) Acquire the experience of planning, design and composition in various scales and scopes
- (2) Develop critical thinking ability
- (3) Use basic research, analysis and synthesis techniques for the solution of a planning/design problem
- (4) Establish the connections of plan and design with natural + cultural scope
- (5) Develop materials, building and construction systems with design in integrated way
- (6) Establish the relationship among design, presentation and production /

construction

WEEKLY
SCHEDULE

W	Date	Study	Presentation	Course learning outcomes
1	6-Feb-23	ARCHIPELAGO EXPERIMENTS: Büyükkada, Heybeliada, Burgaz adası, Kınalı ada	Introduction , site areas, Patterns	1,2,3
	9-Feb-23	Urban pattern		1,2,3,4
2	13-Feb-23	Urban pattern		1,2,3
	16-Feb-23	Field Trip to Prince Islands		2,3,4
3	20-Feb-23	Natural Environment		2,3,4
	23-Feb-23	Architectural pattern: Vernacular architecture, pattern, material, structure	History of Princes' Islands	2,3,5
4	27-Feb-23	Archipelago experiments: Synthesis, Patterns, design principles, parameters		1,2,3,4,5
	2-Mar-23	Jury		1-6
5	6-Mar-23	Archipelago experiments: morphogenetic design		1,2,4,5
	9-Mar-23	Archipelago experiments: morphogenetic design		1,2,4,5
6	13-Mar-23	Archipelago experiments: morphogenetic design		1,2,4,5,6
	16-Mar-23	Archipelago experiments: morphogenetic design		1,2,4,5,6
7	20-Mar-23	Archipelago experiments: morphogenetic design		1,2,4,5,6
	23-Mar-23	JURY		1-6
8	27-Mar-23	SPRING BREAK		
	30-Mar-23			
9	3-Apr-23	DESIGN FOR EXTREMES: An emergency shelter: Assignment of the project themes	Introduction , Climate Adaptive design	1,2,3,4,5
	6-Apr-23	Extreme environments: Location choice, use, extreme conditions		1,2,3,5
10	10-Apr-23	The settlement eXtreme: Nature,life,thermal comfort		3,4,5
	13-Apr-23	The settlement eXtreme: Built structure (Land use, Architecture, Passive climatization, vernacular solutions)	Design examples from world	3,4,5
11	17-Apr-23	Emergency shelter design: Literature review, design principles and concept, design alternatives		1,2,4,5
	20-Apr-23	Ramadan Feast		
12	24-Apr-23	Emergency shelter design		2,4,5
	27-Apr-23	Emergency shelter design		2,4,5
13	1-May-23	National Holiday		
	4-May-23	Emergency shelter design		2,4,5,6
14	8-May-23	JURY		1-6

FOUNDATION
STUDIO
2022-2023 spring

	11-May-23	Emergency shelter design	1,4,5,6
	15-May-23	Emergency shelter design	1,4,5,6
15	18-May-23	Emergency shelter design	1,4,5,6

STUDIO PROCESS & SUBMISSIONS

STUDIO HOURS and USE

The course will be held in class during the hours announced in the weekly program [Monday/Thursday, 08.30–12.30]. Course instructors and students will meet in the allocated studio(s) unless specified otherwise by the course instructors. Each student will have a designated work area during the studio hours. General assemblies or presentations related to the course may be held in the studio using a virtual platform or in one of the conference rooms in Taşkışla.

It is of utmost importance that students keep their working areas clean while in the studio and speckless at the end of the course. **The studio space will be used by another class after ours so it is courteous to evacuate on time with all belongings and trash.**

Please know and comply with [TES Studio Principles](https://tes.mim.itu.edu.tr/studio-principles/).
(<https://tes.mim.itu.edu.tr/studio-principles/>)

ATTENDANCE

It is important that students attend all studio sessions. This means being on time and actively participating in the activities held during the course hours under the direction of the studio instructors. There will be a variety of interactive formats so timeliness is essential for efficient planning and individuals' maximum benefit from peers and instructors. A minimum of 80% attendance is mandatory for a passing grade in studio courses according to ITU Undergraduate Education Regulation Article 23 (Amended: RG-17/6/2021-31514). Please note that the designated 20% is reserved for sickness and other unforeseen circumstances.

STUDIO TECHNOLOGY

Digital platforms will be used profusely during and outside of studio hours to communicate, conduct research, produce and share work. **Ninova** will be used for announcements, access to live or recorded Zoom sessions, and digital submissions. Additionally, instructors may designate other platforms for announcements and sharing work. We also plan to use supporting platforms such as Google Drive, Miro, and Google Jamboard to share work within the class community and collaborate. It is highly advised that each **student has a laptop computer with the necessary equipment/hardware**. Students are advised to use a computer with access to WiFi, a camera, basic word and picture editing software, and sound features. Students are also strongly encouraged to use supporting digital platforms to share multimodal objects and information while interacting with their instructors and peers during studio discussions.

All work is to be produced in accordance with the media, material and format requirements set forth by the instructors in the class or in the announcements made through **Ninova** or other designated platforms.

All participants are expected to adhere to [the codes of ethical conduct](https://odek.itu.edu.tr/en/code-of-honor/ethics-in-university-life).
(<https://odek.itu.edu.tr/en/code-of-honor/ethics-in-university-life>)

DISCUSSIONS and PINUPS

Student works are commonly put under the spotlight for discussion. These discussions serve the purpose of articulating the assessment criteria and conveying suggestions for students to develop their proposals. In these open discussions, students are expected to develop critical perspectives and proactively voice them in the course.

EXHIBITIONS

A selection of student projects will be exhibited digitally both during and at the end of the semester on suitable platforms.

EXCURSIONS

Excursions to online and physical venues, stage performances, film screenings, seminars, and webinars are encouraged, requiring full attentiveness, critical engagement and post-reflection.

JOURNAL

Students are expected to keep a written and visual log of their studio-related processes in a journal that includes sketches, notes and evolving design ideas for their projects. Students are encouraged to use various techniques (drawings, diagrams, collages, writing etc.) in representing their ideas and observations.

JURY ASSESSMENT

The students are expected to express their works in front of jury. Juries compose of course instructors and invited jury members.

ANNOUNCEMENTS All announcements will be made on the **Ninova** class interface. Students need to actively use their ITU usernames to access these and/or get related notifications from the ITU-Mobile app.

EVALUATION Attendance means active participation in the course which comprises both attending the course, taking part in discussions, and completing the assigned tasks during the term. Students who do not meet these requirements will get A VF grade and not be able to make a final submission at the end of the semester.

Project I Grade Assessment Criteria	Quantity	Effects of Grading
Projects (Midterm)	2	% 60
Final Project Submission	1	% 40
Attendance	Minimum 80% attendance is required	

*If you are a student who will need accommodations in this class due to a disability or chronic health condition, we will need an accommodation letter from the Student Disability Center (SDC) before they are implemented. Please share us the letter and/or to further discuss your needs.

READING LIST

Urban Pattern

1. Alexander, C. (1977). *A pattern language: towns, buildings, construction*, Oxford university press.
2. <https://www.patternlanguage.com/>
3. Duany, A., & Plater-Zyberk, E. (1991). *Towns and townmaking principles* (A. Krieger & W. Lennertz, eds.).
4. Duany, A. and E. Plater-Zyberk (1999). "The lexicon of the new urbanism." *Duany Plater-Zyberk & Company*.
5. Bacon, E. N. (1975). *Design of cities*, Thames and Hudson London.
6. Francis D.K. Ching, *Architecture, Form, Space & Order*, 1979
7. Francis D.K. Ching, *Mimarlık ve Sanatta Yaratıcı bir Süreç: Çizim; çev. Çelen Birkan, YEM, 2003*
8. Moughtin, C., *Urban Design: Street And Square*, Butterworth-Heinemann, İngiltere, 1992
9. Wong, W., *Principles of Form and Design*, John Wiley and Sons Inc., 1993

Design For Extremes

10. Liedl, P., et al. (2012). *Building to suit the climate: A Handbook*, Walter de Gruyter.
11. Golany, G. (1983). *Design for arid regions*, Van Nostrand Reinhold.
12. Olgay, V. (2015). *Design with climate: bioclimatic approach to architectural regionalism*. Princeton, Princeton University Press.
13. Littlefair, P., et al. (2000). *Environmental site layout planning: solar access, microclimate and passive cooling in urban areas*, CRC.
14. Bourbia, F. and F. Boucheriba (2010). "Impact of street design on urban microclimate for semi arid climate (Constantine)." *Renewable Energy* **35**(2): 343-347.
15. Margolis, L. and A. Chaouni (2015). *Out of Water - Design Solutions for Arid Regions*. Basel/Berlin/Boston, SWITZERLAND, Birkhäuser.
16. Smith, P. F. (2006). *Architecture in a Climate of Change*, Routledge.

Construction and material

17. Ballast, D. K. (2009). *Architect's handbook of construction detailing*, John Wiley & Sons.
18. Andrea Deplazes (ed.), *Constructing Architecture: Materials, Processes, Structures, a Handbook*, Birkhäuser, 2005
19. H. Leslie Simmons, *Construction: Principles, Materials, and Methods*, John Wiley, 2001
20. Gutdeutsch, G. and P. Lupton (1997). *Building in wood: construction and details*, Birkhäuser.
21. Kubba, S. (2012). *Handbook of Green Building Design and Construction*. Saint Louis, UNITED STATES, Elsevier Science.
22. Watts, A. (2013). *Modern Construction Handbook*. Basel/Berlin/Boston, AUSTRIA, Birkhäuser.

Other resources to read

23. Bruno Zevi, (çev. D. Divanlıoğlu), *Mimariyi Görmeyi Öğrenmek*, Birsen Yayınları, 1990
24. Karatani, K., Kohso, S., & Speaks, M. (1995). *Architecture as Metaphor*

- Language, Number, Money.
25. Lauer, A.D., Pentak, S., Design Basics, 8th Edition, Wadsworth Publishing, 2011
 26. Mohsen Mostafavi, David Leatherbarrow, Weathering: The Life of Buildings in Time, MIT Press, 1993
 27. Paul Shephard, What is Architecture?: An Essay on Landscapes, Buildings, and Machines, MIT Press, 1994
 28. Reid, G.W., From Concept to Form in Landscape Design, Van Nostrand Reinhold, NewYork, 1993
 29. Tufte, E. R., Envisioning information. Optometry & Vision Science, 68(4), 322-324., 1991
 30. Watson,D., Plattus, A., Shibley, R., Time Saver Standarts For Urban Design, Mc Graw Hill Company, 2001
 31. Chiara J.D., Panero, J., Zelnik, M., Time-Saver Standards for Housing and Residential Development, Mcgraw Hill, 1984
 32. Styles, K., Working Drawings Handbook, London : Architectural Press, 1982
 33. Joseph De C., Lee E. K., Time-Saver Standards for Site Planning, New York, Mcgraw- Hill, 1984
 34. Şevki Vanlı, 20. Yüzyıl Türk Mimarlığı, 2006
 35. Tschumi, B. (1996). Architecture and disjunction. MIT press.
 36. Peter Zumtor, Thinking Architecture, Birkhäuser, 2006
 37. Hunt, V., Environmental Graphics : Projects & Process, New York, NY,2003
 38. Giritlioğlu, C., Şehirsel Mekan Öğeleri ve Tasarımı, İTÜ Mimarlık Fakültesi Yayını, 1998
 39. Borges, J. L. Ficciones, Hayaller ve Hikâyeler, Çev. Fatih ÖzgüvenTomris Uyar, 2010
 40. Calvino, I., Görünmez Kentler, çev. Işıl Saatçioğlu, Remzi Kitabevi, İstanbul, 1990
 41. Çetiner, A., Şehir Planlamasında Çalışma Yöntemleri ve İfade Teknikleri, İ.T.Ü.,Mimarlık (Textbook) Fakültesi, Taşkışla, 1979.
 42. Le Corbusier, Mimarlık Öğrencileriyle Söyleşi, YKY, 2007
 43. Le Guin, Ursula, Mülksüzler, 2005
 44. Merleau-Ponty, M., Algılanan Dünya, Çev. Ömer Aygün, İstanbul: Metis, 2005
 45. Yürekli, F. (2010). Mimarlık, Mimarlığımız, YEM Yayınevi.
 46. Robert Harbison, Thirteen Ways: Theoretical Investigations in Architecture, MIT Press, 1997
 47. John Berger, Görme Biçimleri, Metis Yayınları, 1995