

Istanbul Technical University Department of Architecture
Spring 2021 Graduation Project Jury H

Living Well

Salutogenic Design Experiments for Healthy Urban Environments

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Project Theme and Concepts

“What if our health became the basis for judging every building and every public space? What if each of us – every person, everywhere – asked, ‘Does this place cause health? How does it make me feel?’”

“The places we create either cause health or erode our ability to thrive.”

- Tye Farrow, Farrow Partners

The World Health Organization defines health as “a state of complete physical, mental, and social well-being (Bio-Psycho-Social) and not only the absence of illness.” This broader concept of health indicates a higher aspiration than to live out our lives with the primary goal of preventing illness but living well.

We are living in a post-industrial and pandemic age in the knowledge society and care to health should focus on treating illness as well as providing “wellness” by embracing the idea of design actively causing health and promoting a societal change where ‘community assets can be mobilized to create a new normal’. Therefore, we require a new way to look at the role of build environment within the context of health and well-being, called a Salutogenic approach to design.

Research on Salutogenic direction highlights the impact of design factors that inspire the designers and planners toward healthy society to develop conditions that stimulate health and well-being and thereby the promotion of health and prevention of diseases in all levels of society (Dilani, 2001).

Drawing on the idea of ‘salutogenesis’, which refers to the focus on factors that support human health and well-being rather than those that cause disease (pathogenic), architecture which ‘causes health’ is not isolated, placeless and rootless, but promotes five vital elements – nature, authenticity, variety, vitality, and legacy (Antonovsky, 1996).

- Nature – design that is inspired by the natural world
- Authenticity – design that draws on meaningful local influences
- Variety – a range of experiences and a sense of discovery
- Vitality – regenerative space facilitates the flow of people and ideas
- Legacy – design that makes a lasting contribution to health

It is about time, as the world is faced with a remarkable set of health and wellness challenges. Health and wellness provide an unusually potent and powerful lens through which to understand the design of the built environment (Beatley, 2018). It is also time for architects to consider their role in the public health debate. “As licensed professionals to be, it’s your responsibility to watch out for the health, safety and welfare of the public. How deeply do you really think about the implications of your commitment beyond the project at hand?” (American Institute of Architects).

As a society, designers can no longer afford to tolerate places that fail to ensure people thrive. Three generations of constructing environments that deny human beings’ deeply rooted biological needs have generated not only a sudden increase of lifestyle-related diseases, but also “a plague on the human spirit”. The design of every public space, building, campus, community, and home must be judged in terms of its capacity to cause total health, not simply to stop doing physical harm. People must be able to thrive and prosper; to do more than survive and sustain ourselves (Farrow, 2018). Moreover, human beings need contact with nature and the natural environment. They need it to be healthy, happy, and productive and to lead meaningful lives. Conserving and restoring the considerable nature that already exists in cities and finding or creating new ways to grow and insert new forms of nature are paramount challenges of the twenty-first century. (Beatly, 2016)

This Diploma Project jury discusses the approach of such interpretations of Salutogenic Design to promoting health and well-being by creating build environments that focus on health promotion and thereby healthy societies. The challenge of this project is to develop spatial strategies and designs implementing a new mix of functions on-site to revitalize the selected urban area, while rethinking the role of a suburban landscape, communal facilities in the center area, and other characteristics of the neighborhood philosophy in the perspective of the healthy spaces for living in the twenty-first-century city.

The selected project plot in Tuzla district offers not only urban bustle but also room for peace and quiet. There is a balance between tranquility and excitement. The “Umur Deresi” waterfront line area can use an extra impulse to bring extra excitement to the area, whereby the mix of functions is emphatically intended to connect with the profusion of green space. It is precisely these natural wetlands that now present an opportunity for attractive facilities for sports, games and other recreational activities for which there is insufficient or inexistent space in the compact inner district of Tuzla. In addition, the greenery can play a crucial role in the realization of livable urban environments promoting social wellness and health.

Tuzla: Population Exchange, Industrialization and the Urban Periphery

Tuzla's name comes from Tuz Gölü (Salt Lake), which was located in the region and met the salt need in the Byzantine and Ottoman periods. This small settlement was a fishing village and summer resort during the Ottoman period. It is known that during the time of the Greeks, gardening, fishing, animal husbandry and viticulture were done in small amounts. Tuzla Kalekapı location, surrounded by vineyards, turned into a region where okra and artichoke fields were predominant after the exchange. The number of people fishing in the district, which is known as a fishing village, is almost nonexistent. By the end of the 1980s, fishing had been overtaken by industry, particularly shipbuilding. The shipyards of Tuzla are still active today and they characterize the industrial activity within the district.



Tuzla Region

Former Oak and Red Pine forests in the region have not reached today. In the Tuzla region, the plant formation seen today is shrubs and grasses. As a special case, while there are olive groves near the coastline have decreased considerably today. The immigrants, who made their living by farming tobacco struggled with the soil for a long time by damaging the olive groves to a great extent. Some of the old dwellings damaged after the exchange were repaired, the lower floors were made shops, the dwellings that could not be repaired were demolished and single-story masonry dwellings were built instead.

In the travel book of Evliya Çelebi, it is mentioned that the healing waters in İçmeler region, which has existed since the Roman times, gather here every July, thousands of people and stay for days to have fun and to find healing. Today, these healing waters have been preserved and institutionalized and became a health center with accommodation.

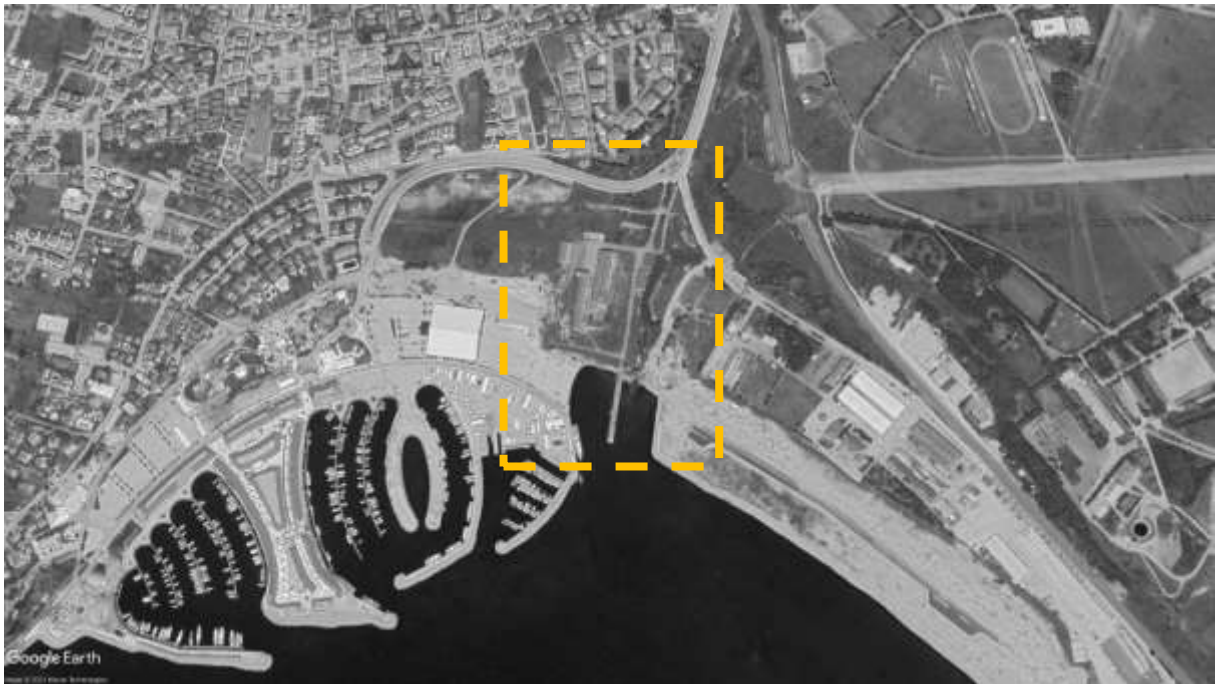
During 1930-50s Agricultural products grown in Tuzla were distributed to Istanbul vegetable markets by sea by using the port. In the 1960s Cumhuriyet Caddesi and Atatürk Caddesi were the two avenues that separated housing and trade. The fishing families dwelled between Cumhuriyet Caddesi and the coastline, and the farmers had their houses on Atatürk Caddesi. Before the fillings, the restaurants and cafes of the fishermen located on Cumhuriyet Street and the coastal part below, and the water piers and ski paddles between them are important focal areas where the people come together and gather. The "mahfels", which were the symbols of the characteristic texture of the Tuzla district, residential buildings with feet on the water, sea coffees and boatyards are now separated from the water. With the arrival of heavy industry, local people dealing with agriculture and fisheries have turned to these new business areas. This caused the water-human relationship to decrease and be forgotten. Established in Tuzla in 1954, the Jeep Factory initiated a migration phenomenon in the Tuzla district, and this migration accelerated with the Eastern Marmara Regional Planning after 1960.

The population in the district consists of young people. Educational background is mainly limited to high school graduation. On the contrary, Tuzla is home to many high-caliber educational institutions –mainly naval education like ITU Maritime School, the Turkish Naval Academy and Piri Reis University; and private universities like Sabancı University, Okan University, Gedik University, Medeniyet University along with numerous public and private high schools. The participation rate of the female population in the labor force is very low and when the distribution by sectors is examined, the highest rate is in the service sector, then in the industry and finally in agriculture. In 2006, it was aimed to equip the empty lands on the E-5 Highway with the function of technology and culture industries with the Istanbul Provincial Environment Order with a scale of 1/100.000, prepared by the Istanbul Metropolitan Municipality. Instead of filling recreation areas with continuous fillings to attract the people to the shore, creating accessible spaces with high diversity and continuous access will be steps towards solving the problems. Converting the coast from a "place to pass" to a "place to go" should become the basic principle of everyone who wants to keep Tuzla alive as a coastal town.

The project area is located in the east of the Tuzla region, around the area where the Umur Creek meets the Marmara Sea. The southwestern part of this area is surrounded by the marina and the new shopping mall. The concrete factory in the area is a large production facility that can be used for new functions. There is a pier structure extending towards the sea in the stream mouth part of the given project site. A clear sea vista is experienced at high elevations along the highway which forms the northern periphery of the area. Students are encouraged to focus on the streamline zone, the stream mouth and their immediate proximity for project development.



Project District



Project Site

The Project Program and Perspectives

The students are asked to develop a vision of the future healthy living core of the Tuzla district. The design proposals should reflect:

- A comprehensive urban development strategy elaborated on the scale of the project site.
- An architectural elaboration that can provide a powerful impulse while prioritizing public health, wellness and social interaction for the core area.

Important focal points for the project assignment are:

- Conceptualizing and redesigning of a new urban core in which a strong green character (on landscape and architectural level) is combined with the urban density in the immediate neighborhood. What kind of livable and innovative housing typologies and social/production facilities might result from these factors?
- Creating a new urban core that lends identity and recognizability to the district. Which characteristic elements are used to give waterfront and “Umur Deresi” wetland area a new urban image and appearance?
- Mixing instead of segregating functions. How does collective production and living take place in an area like this and how are facilities introduced?
- Introducing new economic and production programs –*including the existing manufacturing facility* complementary to the given project site supporting a healthy urban lifestyle and providing opportunities for young people to grow their talents.
- Creating a dynamically functional core where the dynamic is not oriented solely inward, but where public life takes place outdoors instead.
- Redesigning and reprogramming an attractive, productive and healthy green landscape that connects public life in the surrounding neighborhoods. The blue/green zone should be an integral part of the plan, providing high quality public space with opportunities for outdoor activities and solutions for climate adaptation.
- Giving new meaning to the concept of ‘air, light and space’.
- Giving meaning to “living well with nature” in a contemporary manner.
- Bringing together the life of the elderly and young people in the area. How are current social issues such as an inclusive society addressed?
- Good integration of public transportation to the project area.

Students are also expected to investigate how new connections between the project site, the new marina and the Tuzla district can help create a vibrant urban ecosystem combining the high-tech with the people-oriented while exploring the river and the sea waterfront as the connective elements. From an implementation perspective, the final proposals will discuss the given space groups below. The total construction area should stay within the limits of 8000-10000 m².

- Connected Living Spaces: *Housing modules for flexible uses.* 3500-4000 m²
- Community Core and Lifelong Learning Spaces: *For multipurpose use including social activities and gatherings. Such adaptive and modular configurations for different use scenarios are expected.* 1500-2000 m²
- Health Service Core: *A compact installation with health services including and infirmary and a small service unit for patients.* 500-800 m²
- Production spaces: *This may include the existing manufacturing facility for processing new and clean products or a recycling center for various usable materials collected from the Tuzla district.* 2000-2500 m²

Students are also expected to develop sustainable urban & landscape strategies regarding the biodiversity and ecological aspects within the project area & its surrounding. Considering the existing topography, morphology and landscape characteristics of the given project site, students are encouraged to develop effective landscaping strategies and recreational spaces including both active and passive green areas.

The waterfront connections, existing vegetation, climate and local flora can be listed as the key factors for a vibrant and livable landscape that is supposed to be integrated with the proposed architectural layer. Such outdoor functions may include theme-based activities as well as flexible landscape spaces for catalyzing creativity and social interaction.

Aim and Scope

Diploma project, as an essential phase of architectural education, aims to bring the students into adequate architectural knowledge, reasoning, skills and decision-making mechanisms. It aims to validate that each student has acquired the understanding and competence necessary for the architectural profession. It requires the demonstration of the knowledge and skills to produce an architectural solution and to make design decisions about a single project as well as a comprehensive integration and consideration of design knowledge and decisions across systems, scales and disciplines. The diploma project consists of the student projects, 3 jury sessions to be held throughout the semester, and a final review. The final product is expected to culminate from the program defined in the brief. The semester-long design process concludes with an outcome of an architectural project reflecting students' performances, intellectual actions, and their approach to architectural research and analyses within a given scope. The development of each student is examined and improved through jury evaluations and critics.

- **Project:** The project will be the outcome of the students' studies on the given subject and especially their personal arguments and efforts. The result is expected to be developed in guidance of the specified architectural program, urban context and other conditions concerning the location and program.
- **Jury Sessions:** The project developed by the students will be presented to the jury members at the indicated dates. All the drawings and other requested documents should be prepared for the sessions, in order to be reviewed and evaluated by the jury. In these sessions the jury members will share their critics and comments on the proposals. All the material that will be presented should be handed over personally to the evaluation committee five days before the indicated date, until 14:00 via Ninova system. On the day of the jury session, all the students are expected to be present at 09:30 for the jury to review the poster presentations. The reviewing order of the projects will be determined on the jury day. Participation is mandatory.
- **Final Jury:** Final Jury will be held for the presentations and explanations of the completed projects. Besides that, the jury members may ask students various questions in order to gain insight about the students' approach. The project is not regarded as the sole input for evaluation. The final evaluation and grading includes all the stages, i.e. the final project, preliminary and final juries together; the project should not be regarded as the single input for the final evaluation.

The student needs to meet the Prerequisites for the Graduation Project (MIM 492, MIM 492E) or the Diploma Project (MIM 4902, MIM 4902E) in the curriculum and 'Other Requirements' determined by the Senate. For the general rules not written in the Diploma Project Principles, the "Senate Principles" are valid related to taking the Diploma Project, submissions and examinations of the Diploma Project.

Links below must be checked:

<https://www.mimogis.itu.edu.tr/duyurular/ogduyuru.htm>

https://www.mimogis.itu.edu.tr/duyurular/belgeler/fk_karar.pdf

https://www.mimogis.itu.edu.tr/duyurular/belgeler/on sart_tablo.pdf

http://www.sis.itu.edu.tr/bitirme_onsart.htm

<http://www.sis.itu.edu.tr/tr/yonetmelik/bitirme.html>

<https://www.sis.itu.edu.tr/TR/mevzuat/bitirme-esaslar.php>

Jury Evaluations and Criteria

The graduation project consists of the project, jury sessions during the semester and the final review. The final product is expected to culminate from the program developed according to the given content, the environmental factors, and projections, as well as from the student's intellectual actions and design processes.

Students will present their project proposals to the jury members on the determined jury dates. All the deliverables including all the drawings and the other requested documents should be prepared and submitted on time for the jury reviews and assessments. During these sessions, the jury members will share their criticisms and comments on the design proposals.

Submissions should be uploaded to the Ninova System on the given dates until 18:00. In case of changes in the submissions schedule new dates will be announced by the graduation project coordination committee.

Jury sessions have a 40% share, the final submission and the final jury have a 60% share on the overall grade. Jury members will grade the whole process and the final project according to the criteria referencing to the Course Catalog Form:

- Attendance to the jury and seminar sessions;
- Individual evaluation of the design problem, ability to approach design problems in a multidimensional fashion, performance of carrying out the whole design process with a critical design approach with an indepth social/cultural stance and an architectural program;
- Expected competence in establishing relations of design decisions with the context, program and spatial-formal-architectonic layout including materiality and structural composition;
- Adequate usage of representation tools in the production, development and communication of design concepts, competence in multidimensional representation media;
- Submission of required materials both for the jury sessions and the final submission.

As the jury sessions will be recorded on ITU Ninova Zoom system, students will be receiving feedback about their process and the overall quality of their design proposals.

On the jury days, all students are expected to be online at 09:30 a.m. on the Ninova/Zoom system and make all necessary arrangements for the jury review. The order of presentations will be organized just before the jury sessions. If the student is absent without an admissible excuse, the project will not be assessed.

Attendance to all juries is compulsory. Skipping one of these juries may cause failing the course. Students, who do not participate in more than one jury, will be failed with the VF grade. Students, who fail to submit their final project, or, final submissions without the final jury participation will be considered unsuccessful (FF). The minimum passing grade of the MIM492e Graduation Project course is CC (2.00/4.00). Documented excuses must be submitted to the department.

Schedule

<i>Date</i>	<i>Hour</i>	<i>Task</i>	<i>Location</i>
March 1, 2021 Monday	-	Beginning of 2020-2021 Spring term	-
March 3, 2021 Wednesday	13:30	Submission of Diploma Project brief and meeting	Zoom
March 10, 2021 Wednesday	17:00	Deadline for submitting questions	Department e-mail
March 17, 2021 Wednesday	13:30	Announcement of the answers	
April 4, 2021 Sunday	Until 18:00	Submission of documents for 1st Jury	Ninova
April 7, 2021 Wednesday	09:30	1st JURY	Zoom
May 2, 2021 Sunday	Until 18:00	Submission of documents for 2nd Jury	Ninova
May 5, 2021 Wednesday	09:30	2nd JURY	Zoom
May 30, 2021 Sunday	Until 18:00	Submission of documents for 3rd Jury	Ninova
June 2, 2021 Wednesday	09:30	3rd JURY	Zoom
June 11, 2021 Friday	-	End of the Spring semester	-
June 27, 2021 Sunday	Until 18:00	Submission of documents for Final Jury	Ninova
July 1, 2021 Thursday	09:30	FINAL JURY	Zoom
July 4, 2021 Sunday	14:00	Grade Submission on SIS	SIS ITU

Deliverables for the Jury Evaluations

The materials for jury evaluation is specified both for students and jury sessions. Jury members may ask additional contents from students for their process through juries. For the final jury, students are expected to provide the materials described in the Article 7 of the Diploma Project Principles in minimum.

The required documents for the jury evaluations are explained as the following according to the specific jury sessions. Students should present comprehensive visuals and information about their design proposals including thoughts, concepts, assumptions, contextualization, environmental data etc.

Students are required to present their conceptual approach of the project proposals along with the interpreted architectural program with all indoor and outdoor spaces. Such diagrams design proposals and visual/verbal explanations are also expected for the corroboration of creating, learning and social activities with environmental/contextual aspects of design. Students should also consider formal, spatial and visual performance criteria for the catalysis of public space within the context. In addition, such technological advancements and their effects on space can be listed as a key factor that may be reflected in design strategies.

Required Deliverables for the 1st Jury

16:9 ratio (landscape) presentation boards that should show ideas, concepts and decisions that were improved through research and analyses for the project proposal and scenarios for the whole of the urban area by using different representation techniques like schemas, diagrams, drawings, texts, photographs, perspectives, models, collages, films specified by individual approaches and in convenient various scales. Students are encouraged to develop various alternatives. Presentation boards will be in 16:9 ratio for screen sharing during online jury sessions via Zoom. There must be a scale bar in every presentation board.

- Urban Analyses and Mappings: *Analyses and diagrams about the urban relationships and texture with the initial site plan and contextual design decisions. The analyses may reference the urban DNA; cultural and social character of the district; socio-economic status; urban transportation networks; micro-climate etc. These deliverables should include meticulous urban readings, comprehensive interpretations and high quality visuals (photos, panoramas and infographics) in order to communicate the conducted urban analyses and initial design decisions.*
 - Diagrams and visuals for the design strategies and the conceptual approach.
 - 1/2000 Masterplan. *This masterplan should present all relationships between the project site and the main urban nodes in the 1/2000 scale limits. Such critical topics like public space networks, transportation, accessibility, traffic densities and solution alternatives should also be elaborated.*
 - Site plan in an appropriate scale (1/500, 1/1000)
 - Urban silhouettes and site sections.
 - Aerial digital model and axonometric views
 - 1/500 schematic plans and sections (with indoor and close outdoor spaces).
 - Conceptual Models, Perspectives and Collages
- An A3 booklet will be submitted as a summary of the whole process of the work done for the 1st jury including the architectural design report attached.

Required Deliverables for the 2nd Jury

16:9 ratio (landscape) presentation boards that should show ideas, concepts and decisions that were improved through research and analyses for the project proposal and scenarios for the whole of the urban area by using different representation techniques like schemas, diagrams, drawings, texts, photographs, perspectives, models, collages, films specified by individual approaches and in convenient various scales. Students are encouraged to develop various alternatives. Presentation boards will be in 16:9 ratio for screen sharing during online jury sessions via Zoom. There must be a scale bar in every presentation board.

- Diagrams explaining the design approach including the building form, spatial configuration, user experience, indoor and outdoor spatial character and circulation.
- 1/1000 masterplan. *(This masterplan should present all relationships between the project site and the main urban nodes in the 1/1000 scale limits.)*
- 1/1000 silhouettes and sections
- Site plan in an appropriate scale (1/500, 1/1000-with indoor and close outdoor spaces).
- Aerial digital model and axonometric views
- 1/500 plans, sections and elevations *(Drawings should employ 1/200 scale LOD conventions. architectural design decisions spatial relation scenarios, interpretations of the program and operational systems and the research about subsystems i.e. structural system, building element systems and service systems' type and materials and their representative drawings)*
- 1/200 scale partial plans and sections *(These will include main spatial nodes and social/public spaces which are given in the framework program)*
- Building technology and architectonics: System details regarding structural layout, materiality, building envelope and building components *(1/50 scale sections or sectional perspectives).*
- 3D visuals and perspectives.

Required Deliverables for the 3rd Jury

16:9 ratio (landscape) presentation boards that should show ideas, concepts and decisions that were improved through research and analyses for the project proposal and scenarios for the whole of the urban area by using different representation techniques like schemas, diagrams, drawings, texts, photographs, perspectives, models, collages, films specified by individual approaches and in convenient various scales. Students are encouraged to develop various alternatives. Presentation boards will be in 16:9 ratio for screen sharing during online jury sessions via Zoom. There must be a scale bar in every presentation board.

- Diagrams explaining the design approach including the building mass/form, spatial configuration, user experience, indoor and outdoor spatial character and circulation.
- 1/1000 masterplan. *(This masterplan should present all relationships between the project site and the main urban nodes in the 1/1000 scale limits.)*
- Site plan in an appropriate scale (1/500, 1/1000-with indoor and close outdoor spaces).
- Aerial digital model and axonometric views
- 1/500 plans, sections and elevations *(Drawings should employ 1/200 scale LOD conventions. architectural design decisions spatial relation scenarios, interpretations of the program and operational systems and the research about subsystems i.e. structural system, building element systems and service systems' type and materials and their representative drawings)*
- 1/200 scale partial plans and sections *(These will include main spatial nodes and social/public spaces which are given in the framework program)*
- 3D visuals and perspectives.
- Building technology and architectonics: System details regarding structural layout materiality, building envelope and building components *(1/50 scale sections or sectional perspectives).*

Required Deliverables for the Final Jury

16:9 ratio (landscape) presentation boards that should show ideas, concepts and decisions that were improved through research and analyses for the project proposal and scenarios for the whole of the urban area by using different representation techniques like schemas, diagrams, drawings, texts, photographs, perspectives, models, collages, films specified by individual approaches and in convenient various scales. Students are encouraged to develop various alternatives. Presentation boards will be in 16:9 ratio for screen sharing during online jury sessions via Zoom. There must be a scale bar in every presentation board.

- Diagrams explaining the design approach including the building form, spatial configuration, user experience, indoor and outdoor spatial character and circulation.
- 1/1000 masterplan. *This masterplan should present all relationships between the project site and the main urban nodes in the 1/1000 scale limits.*
- Site plan in an appropriate scale (1/500, 1/1000-with indoor and close outdoor spaces).
- Aerial digital model and axonometric views
- 1/500 plans, sections and elevations *(Drawings should employ 1/200 scale LOD conventions. architectural design decisions spatial relation scenarios, interpretations of the program and operational systems and the research about subsystems i.e. structural system, building element systems and service systems' type and materials and their representative drawings)*
- 1/200 scale partial plans and sections *(These will include main spatial nodes and social/public spaces which are given in the framework program)*
- 3D visuals and perspectives.
- Building technology and architectonics: System details regarding structural layout materiality, building envelope and building components *(1/20 or 1/50 scale sections or sectional perspectives).*

Presentation Guidelines

The size for the presentation boards is 16:9 horizontal ratio in .PDF file format. (For some tips about optimizing your PDF files, you can visit <https://darch.itu.edu.tr/tips-pdf-optimization/?lang=en>.) The ground level plans, sections, and elevations must include the immediate surroundings, transportation (vehicle and/or pedestrian) connections and close landscape of the building. The method of presentation is on students' choice, provided that the students themselves prepare and present the material. Drawing methods, use of manual or digital representation techniques, 3D modeling of the project proposal and use of color is left to the discretion of the student. In addition to these, students are advised to submit properly formatted documents if sketches, graphics and textual descriptions depicting the process are to be used. Posters are to be prepared with a view to project integrity and ease of exhibition and preservation. Also each poster, layout plan and model will be organized from the same viewing direction graphically. Expressing the architectural project in its entirety and authenticity will be taken into consideration in the evaluation.

Project documents will be uploaded to the Ninova system. Documents should not exceed 50 MB size per file. For A3 exhibition, Faculty Archive and NAAB documents, a template will be shared with students via Ninova again.

References & Resources

Antonovsky, A. (1996). The salutogenic model as a theory to guide health, promotion. *Health Promotion International*, Vol. 11, No. 1, Oxford University Press.

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Beatley, T. (2016). *Handbook of Biophilic City Planning and Design*, Island Press. Washington DC.

Beatley, T. (2018). *Biophilic Flourishing: the role of nature in creating healthy cities in Healthy Environments, Healing Spaces: practices and directions in health, planning, and design* / edited by Timothy Beatley, Carla Jones, and Reuben Rainey. Description: Charlottesville: University of Virginia Press.

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