

COURSE INFORMATION					
Course Title	Code	Semester	L+P Hour	Credits	ECTS
DESIGN WITH NATURE	LAUD 507		3+0	3	10

Prerequisites	
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Language of Instruction	English
Course Level	Graduate
Course Type	Elective
Course Coordinator	
Instructors	Asst. Prof. Dr. Pınar Karakaş
Assistants	
Goals	This course aims to examine the common denominators with design by considering all the components of nature as a natural system and the importance of using nature and design in professional practices in sustainability.
Content	Within the scope of the course; all components of nature as a system; the functioning of natural systems and understanding of ecosystems; considering the basic concepts, approaches, and tools of design with nature; the use of natural elements in the design; ecological design approach will be examined.

Learning Outcomes	Program Learning Outcomes	Teaching Methods	Assessment Methods
1) Explains ecological design concept.		1,2,3	A,C
2) Explains practical methods and tools for designing with nature.		1,2,3	A,C
3) Applies principles of biophilic design.		1,2,3	A,C
4) Compares different approaches to nature-inspired design.		1,2,3,5,6	A,C
5) Explains theoretical bases of design with nature and sustainability.		1,2,3,5,6	A,C

Teaching Methods:	1: Lecture, 2: Question-Answer, 3: Discussion, 4: Drawing, 5: Case Study 6: Presentation
Assessment Methods:	A: Testing, C: Homework

COURSE CONTENT		
Week	Topics	Study Materials
1	INTRODUCTION	
2	ECOLOGICAL DESIGN CONCEPT	
3	THE THEORY OF BIOPHILIA	
4	BIOPHILIC DESIGN, BENEFITS OF BIOPHILIC DESIGN	
5	PRINCIPLES OF BIOPHILIC DESIGN	
6	EXPERIENCES AND ATTRIBUTES OF BIOPHILIC DESIGN	
7	BIOPHILIC DESIGN APPLICATIONS	
8	MIDTERM EXAM	
9	BIOPHILIC CITIES	
10	BIOPHILIC ACTIVITIES	
11	BIOPHILIC URBAN DESIGN AND PLANNING	
12	NATURE-INSPIRED DESIGN AND SUSTAINABILITY	
13	NATURE-INSPIRED DESIGN STRATEGIES	
14	CASE STUDIES	
RECOMMENDED SOURCES		
Textbook	Kellert, S.R., (2018). Nature by Design	
Additional Resources	Beatley, T., (2011). Biophilic Cities - Integrating Nature into Urban Design and Planning. Van der Ryn, S. & Cowan, S., (1996). Ecological Design.	
MATERIAL SHARING		
Documents	Case Studies	
Assignments	Examination of the Case Studies	
Exams	Seminar and Presentation / Written	

ASSESSMENT		
IN-TERM STUDIES	NUMBER	PERCENTAGE
Mid-term	1	50
Assignment	1	50
Total		100
CONTRIBUTION OF FINAL EXAMINATION TO OVERALL GRADE		50
CONTRIBUTION OF IN-TERM STUDIES TO OVERALL GRADE		50
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	Develops and deepens the theoretical and practical knowledge at the level of expertise in the field of Urban Design and Landscape Architecture, based on the qualifications of undergraduate education.					X
2	Has knowledge of legal and managerial issues such as national / international environmental policies and legislation, as well as discusses current developments and changes.			X		
3	Has critical awareness of the nature of knowledge, its sources, and the problems of knowledge production and the testing of knowledge in the areas of Architecture / planning / design and Interfaces between other related areas. Is able to discuss the interaction between disciplines related to the field.					X
4	Has extensive knowledge of the criteria and processes that are effective in determining urban design requirements such as socio-economic and spatial standards and the ability to use these criteria within the design process.				X	
5	Knows world examples in urban design and its parts, follows current developments and has an idea about how they can be handled according to the conditions of the country.					X
6	Has extensive knowledge about the current techniques and methods applied in the field of Biological-Ecological Environmental Protection (Nature conservation, landscape planning, recreational planning, Green area planning, protected area planning, etc.) and solutions for local and global environmental problems and their limitations.					X

7	Has extensive knowledge about ecosystem, biodiversity and sustainable resource management, rural development, design, planning and technology use.					X
8	Has the ability to prepare urban design / landscape design projects or research projects based on theoretical and practical knowledge by following /producing innovative methods and ideas.					X
9	Has problem-solving skills necessary for integrating knowledge from different fields and the ability to critically evaluate academic research.		X			
10	Has the competence to access information, databases and other resources, and conduct specific scientific studies, as well as the ability to share and discuss open and systematic knowledge with experts and non-experts.		X			
11	Is conscious of the social and professional ethical responsibilities that may arise from the application of information and decisions.			X		
12	Protects public benefit in the design of urban components and the shaping of the city as a whole, and acts with social responsibility					X
13	Has the attitude to decide and act with judicial awareness by showing respect to human, social and cultural rights, and by being sensitive to the protection of the natural environment and cultural heritage.					X

ECTS ALLOCATED BASED ON STUDENT WORKLOAD BY THE COURSE DESCRIPTION			
Activities	Quantity	Duration (Hour)	Total Workload (Hour)
Course Duration (Including the exam week: 16 x Total course hours)	16	3	48
Hours for off-the-classroom study (Pre-study, practice)	16	10	160
Mid-term exam	1	16	16
Homework	1	10	10
Final examination	1	16	16
Total Work Load			250
Total Work Load / 25 (h)			10
ECTS Credit of the Course			10