

## **ECTS COURSE INFORMATION FORM**

	Faculty of Arts, Design and Architecture	
Program	B.Sc. in Architecture	Elective

Course Code	ARC 466				
Course Title in English	<u> </u>				
Course Title in Turkish	YEŞİL STRATEJİLER				
Language of Instruction	English				
Type of Course	Flipped Learning	Flipped Learning			
Level of Course	Undergraduate	Undergraduate			
Semester	Spring				
Contact Hours per Week	Lecture: 3	Recitation:	Lab:	Other:	
Estimated Student Workload	125 hours per semester.				
Number of Credits	5 ECTS				
Grading Mode	Standard Letter Grade				
Pre-requisites	None				
Expected Prior Knowledge	None				
Co-requisites	None				
Registration Restrictions	Only Undergradua	te Students			
Overall Educational Objective	To learn basic knowledge of sustainability in architectural design and generating an overall awareness to a sustainable way of living.				
Course Description	This elective course aims to create a discussion around sustainability within the context of environmental design principles, low-energy buildings and green strategies. The course framework consists of not only sustainable design but also how we shape the physical environment with the acts and behaviors we commonly use in our everyday lives.				
Course Description in Turkish	Bu ders kapsamında sürdürülebilirlik ilkeleri, mimari tasarımda enerji verimliliği ve çevreyi gözeten tasarım ilkeleri olarak ele alınmaktadır. Aynı zamanda günlük yaşantımızda sıklıkla kullandığımız davranış şekillerimiz ile fiziksel çevreyi nasıl değiştirdiğimiz üzerine stratejiler tartışılmaktadır (paylaşım ekonomisi, yeniden kullanım, atık geri-dönüşümü, ileri-dönüşüm, su kullanımı, geleceğin gıda üretimi, sürdürülebilir moda vb.)				

## Course Learning Outcomes and Competences

Upon successful completion of the course, the learner is expected to be able to:

- 1. Know a basic knowledge of designing energy efficient buildings based on 5 main environmental design principles;
- 2. Understand about green building guidelines through LEED;
- 3. Consider the environmental factors in design process, the difficulties and potentials of the energy efficiency, indoor environmental quality and materials;
- 4. Watch and analyze a sustainability related documentary in a group discussion;
- 5. Raise social awareness about environmental problems related to current consumption tendencies.

Relation to Program Outcomes and Competences: N=None S=Supportive H=Highly Related

Program Outcomes and Competences		Assessed by
	N/S/H	Exam, Project, HW, Lab, Presentation, etc.
1. Ability to read, write and speak effectively in Turkish and English, equivalent to a B2 European Language Passport Level in English.	S	
<ol> <li>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.</li> </ol>	S	
<ol> <li>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.</li> </ol>		
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.	Н	Weekly assignments
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.	S	
6. Understanding of 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.	S	
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 of 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.	N	
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.	Н	Research project

	Leadership in Energy and Environmental Des  3. Explanation of Sustainable Sites, Water Effic			
	1. 2.	Introduction to the course and the content  Outlining the green building principles in six	major t	opics, followed by
Course Contents	Week	Topic		
Name of Instructor	Nazlı ÖDEVCİ			
Semester	Spring 2019-2020			
Prepared by and Date	MSc. Architect Nazlı Ödevci 13.04.2020			
consultants and assen	nbling teams, I managemer	for competing for commissions, selecting recommending project delivery methods, at and business planning, time management, rbitration.	N	
construction of building	gs and provio	Il issues involved in the design and de services for the benefit of the society. In ocial responsibility in global and local scales the society.	Н	Weekly assignments
effecting the design a	nd construction	esponsibilities of the architect of the architect on of a building such as public health and building codes and regulations as well as user	S	
17. Understanding of the responsibility of the architect to organize and lead design and construction processes considering the environmental, social and aesthetic issues of the society.			Н	Guest Lecturers
	n processes a	ples and concepts of different fields in and the ability to work in collaboration with team.	S	
15. Ability to choose a implementation of des		aterials, products and components in the envelope systems.	S	
14. Understanding of 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.				Weekly assignments
design phase to desig	Ability to produce a comprehensive architectural project from the schematic ign phase to design development phase, while integrating structural systems, safety and sustainability principles.			
components and asse	the basic principles in the selection of materials, products, emblies, based on their characteristics together with their ng their environmental impact and reuse possibilities.			Weekly assignments
	lectrical, fire	Il principles of building and safety systems prevention, vertical circulation additionally to esign of buildings.	N	

	14. The life cycle of a t-shirt / Bir T-shirt'ün hayat döngüsü: 6 dk, ABD 15. Before the Flood: The Göksu River Valley: 8 dk, Turkey, 2017 16. Yedikule Gardens / Yedikule Bostanları: 7dk, Turkey, 2018 17. Power of Community: How Cuba Survived Peak Oil / Halkın Gücü: Küba Petrol				
	11. Midway Island / Midway Adası 12. Unravel / Sökme: 14 dk, Hindistan, 2012 13. The True Cost / Gerçek Bedel: 92 dk, ABD, 2015				
	9. Wake Up Call / Uyandırma Çağrısı: 6 dk, ABD, 2014 10. Taste The Waste / Atığın Tadı: 88 dk, Almanya, 2011				
	8. The Story of Bakeys Edible Cutlary / Kullan-Ye Kaşıkların Hikayesi: 4 dk, Hindistan, 2016				
	<ol> <li>Cosmos: A SpaceTime Odyssey, Episode 12: The World Set Free / Kosmos dizisi 12. Bölüm: 47 dk, USA, 2014</li> <li>Man / İnsanoğlu: 4 dk, ABD, 2012</li> </ol>				
	<ol> <li>The Story of Bottled Water / Şişelenmiş Suyun Hikayesi</li> <li>The Plastic Ocean / Plastik Okyanus: 91 dk, ABD</li> </ol>				
	<ol> <li>The Story of Cosmetics / Kozmetiklerin Hikayesi:</li> <li>The Story of Electronics / Elektroniklerin Hikayesi</li> </ol>				
	Documentaries: 1. The Story of Stuff / Şeylerin Hikayesi: 20 dk, ABD, 2007				
	4. Busch, O. (2017) Moda Praksisi, Yeni İnsan Yayınevi				
Readings	<ol> <li>Uluengin, M. (2016), Zehirsiz Ev. Modus Kitap, İstanbul</li> <li>Busch, O. (2015), Victims of Style, New York: Selfpassage</li> </ol>				
Required/Recommend ed	Read: 1. Kolektif (2015) - Sürdürülebilir Moda. Editor: Kipöz, Ş. Yeni İnsan Yayınevi, İstanbul				
	16.	Final Examination Period			
	15.	Final Examination Period			
	14.	Final Assessment (Group project)			
	13.	Final Assessment			
	12.	Discussions around waste: Can we reduce waste by knowing the ingredients?			
	11.	Discussions around sharing economy			
	10.	Discussions around food production and urban farming			
	9.	Discussions around fast fashion: ethics  Discussions around drinkable water			
	8.				
	7.	Discussions around fast fashion: environmental impacts			
	6.	Discussions over sustainable development: The Natural Step			
	5.	In-class study of a small scale green building project			

Laboratory Work	-
Computer Use	Yes
Other Activities	Site visit
Assessment Methods	%40 In-Semester Works (active participation to the discussions during class, attendance, After-Class works and tasks) and %30 Middle of Semester Submission, %30 End of Semester Submission
Course Administration	Email: odevcin@mef.edu.tr There is a 70% attendance requirement. Attendance is also recommended for the lectures, site visits and documentary screenings. Students are expected to read the compulsory text/film given before attending to the class and should submit the works on time. Third party submissions are not accepted. Academic Dishonesty and Plagiarism: YÖK Disciplinary Regulation.

## ECTS Student Workload Estimation

Activity	No/Weeks		Hours	Calculation	Explanation	
				Completing the		
	No/Weeks per	Preparing for the	Spent in the	Activity		
	Semester (A)	Activity (B)	Activity Itself (C)	Requirements (D)		
Lecture	14	1	3	1	70	A*(B+C+D)
Lab etc.					0	
Midterm(s)				ľ	0	A*(B+C+D)
Assingment, Project,						
Presentation, Jury	14	4	0	0	56	A*(B+C+D)
Final Examination					0	A*(B+C+D)
Total Workload					126	
Total Workload/25					5,04	
ECTS					5	