

School of Fine Arts Design and Architecture / Architecture

2023 - 2024 Academic Year

SUSTAINABLE ARCH. and GREEN BUIL. RATING SYS.

Syllabus

Course Description					
Name	Code	Semester	T+A Hour	Credit	ECTS
SUSTAINABLE ARCH. and GREEN BUIL. RATING SYS.	MIM3215128	Spring Semester	2+0	2	4
Prerequisites Courses					
Recommended Elective Courses					
Language of Instruction	Turkish				
Course Level	First Cycle (Bachelor's Degree)				
Course Type	Elective				
Course Coordinator	Assist.Prof. Mustafa ERDEM				
Name of Lecturer(s)	Assist.Prof. Mustafa ERDEM, Lect. Ebru ÜNVER KARAER				
Assistant(s)					
Aim	To provide information about sustainable architecture, green buildings and green building rating systems				
Course Content	This course contains; 1. Week Introduction to the concept of sustainability, sustainable development, sustainable architecture ,2. Week Introducing the purposes and basic features of green building and green building rating systems ,3. Week Site selection and land use principles in Green Buildings ,4. Week Principles for water conservation and efficiency in Green Buildings ,5. Week Material selection and use; life cycle analysis methods in Green Buildings ,6. Week Principles for ensuring indoor quality in Green Buildings ,7. Week Energy conservation and efficiency in Green Buildings, use of renewable energy resources,8. Week Midterm,9. Week Examples of green building rating systems (LEED, BREEAM, EDGE, B.E.S.T, YeS-Tr, etc.) ,10. Week Examples of green building rating systems (LEED, BREEAM, EDGE, B.E.S.T, YeS-Tr, etc.) ,11. Week Examples of green building rating systems (LEED, BREEAM, EDGE, B.E.S.T, YeS-Tr, etc.) ,12. Week Examples of green building rating systems (LEED, BREEAM, EDGE, B.E.S.T, YeS-Tr, etc.) ,13. Week Student Presentations ,14. Week Student Presentations.				
Course Learning Outcomes			Teaching Methods	Assessment Methods	
The student gains the ability to recognize and examine sustainable green buildings and green building evaluation systems with examples.			10, 12, 13, 16, 9	A, C	
The student recognizes national and international sustainable green building evaluation systems and has knowledge of relevant legislation.			10, 12, 13, 16, 9	A, C	
The student acquires the ability to design and analyze designs at the settlement/building scale in line with the principles of sustainability in architecture.			10, 12, 13, 16, 9	A, C	
The student acquires basic sustainability principles and sustainability principles in architecture.			10, 12, 13, 16, 9	A, C	
The student becomes aware of the role and impact of the built environment on sustainability, climate change, resource depletion, etc.			10, 12, 13, 16, 9	A, C	
Teaching Methods	10: Discussion Method, 12: Problem Solving Method, 13: Case Study Method, 16: Question - Answer Technique, 9: Lecture Method				
Assessment Methods	A: Traditional Written Exam, C: Multiple-Choice Exam				
Lecture Schedule					
Sequence	Topics	Preliminary Preparation			
1	1. Week Introduction to the concept of sustainability, sustainable development, sustainable architecture				
2	2. Week Introducing the purposes and basic features of green building and green building rating systems				
3	3. Week Site selection and land use principles in Green Buildings				
4	4. Week Principles for water conservation and efficiency in Green Buildings				
5	5. Week Material selection and use; life cycle analysis methods in Green Buildings				
6	6. Week Principles for ensuring indoor quality in Green Buildings				
7	7. Week Energy conservation and efficiency in Green Buildings, use of renewable energy resources				
8	8. Week Midterm				
9	9. Week Examples of green building rating systems (LEED, BREEAM, EDGE, B.E.S.T, YeS-Tr, etc.)				
10	10. Week Examples of green building rating systems (LEED, BREEAM, EDGE, B.E.S.T, YeS-Tr, etc.)				
11	11. Week Examples of green building rating systems (LEED, BREEAM, EDGE, B.E.S.T, YeS-Tr, etc.)				
12	12. Week Examples of green building rating systems (LEED, BREEAM, EDGE, B.E.S.T, YeS-Tr, etc.)				
13	13. Week Student Presentations				
14	14. Week Student Presentations				
Evaluation Methods		Weight(%)			
Midterm Exam		50			
General Exam		50			

Resources
Will be shared in class.Juniper, T., The Ecology Book, Dorling Kindersley Publishers LTD, ISBN: 9780241350386, 2019.
Yudelson, J., Meyer, U., The World's Greenest Buildings: Promise Versus Performance in Sustainable Design, Routledge, 2013.
Duran, S., C., Herrero, J., F., The Sourcebook of Contemporary Green Architecture, Harper CollinsPublishers, ISBN 978-0062004628, 2013.