



AYDIN ADNAN MENDERES UNIVERSITY
GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES
LANDSCAPE ARCHITECTURE
LANDSCAPE ARCHITECTURE
LANDSCAPE ARCHITECTURE MASTER
COURSE INFORMATION FORM

Course Title	Rain Gardens in Urban Green Infrastructure Systems								
Course Code	ZPM526	Course Level			Second Cycle (Master's Degree)				
ECTS Credit	8	Workload	200 (Hours)	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	The purposes of this course are to teach the students the definition, function, benefits and components of green infrastructure systems and the planning stages of the green infrastructure system with examples and to teach the definitions, types, functions, and benefits of rain gardens in urban green infrastructure system, and to show design stages of the rain gardens together with examples.								
Course Content	The contents of this course are the concept, definition, benefits, components, and planning stages of green infrastructure system and the definition, functions, benefits, and design stages of rain gardens.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Case Study, Individual Study								
Name of Lecturer(s)									

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	30
Final Examination	1	40
Assignment	2	30

Recommended or Required Reading

1	Benedict, B. A. & McMahon, E. D. (Unknown) Green Infrastructure: Smart Conservation for the 21st Century, Sprawl Watch Clearing House Monograph Series
2	Anonim (2015) Demystifying Green Infrastructure, UK Green Building Council, Report.
3	European Commission (2013) Building a Green Infrastructure for Europe, Report, Belgium.
4	European Environment Agency (2011) Green infrastructure and territorial cohesion: The concept of green infrastructure and its integration into policies using monitoring systems, No: 18, European Environment Agency.
5	Forest Research (2010). Benefits of green infrastructure. Report to Defra and CLG. Forest Research, Farnham.
6	Clemson University Public Service Activities (2008) Rain Gardens: A rain garden manual for South Carolina.
7	Bannerman, R. and Considine, E. (2003) Rain gardens: A how to manual for homeowners. Wisconsin Department of Natural Resources
8	Tuna, R. (2016) Green Roof, Green Wall and More: Green Infrastructure, 387, pp. 12-15, Architecture
9	Hepcan, Ç. C., & Hepcan, S. Urban green infrastructure analysis: Bornova example. Mediterranean Agricultural Sciences, 31 (1), 1-1
10	Demir, D. (2012). Comparison of Conventional Rainwater Management Systems and Sustainable Rainwater Management Systems: İTÜ Ayazağa Campus Sample (Doctoral Dissertation, Institute of Natural and Applied Sciences).
11	Müftüoğlu, V., & Perçin, H. (2015). Rain Garden in the Context of Sustainable Urban Rain Water Management. Inonu University Art and Design Magazine, 5 (11), 27-37.

Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction to course: content, reason, importance, process method and needs
2	Theoretical	Green infrastructure concept: Definition, terminology and function
3	Theoretical	Benefits of green infrastructure: economic, social, environmental, hydrological, and ecological
4	Theoretical	Green infrastructure components and systems
5	Theoretical	Green infrastructure planning stages
6	Theoretical	Examination of green infrastructure case studies
7	Theoretical	Rain gardens in green infrastructure systems: Definition, types, functions, and benefits
8	Intermediate Exam	Midterm exam
9	Theoretical	Rain gardens design: Determine the locations, size, and depth of the rain gardens.
10	Theoretical	Selection of plants for rain gardens
11	Theoretical	Examination of case studies of rain garden design
12	Theoretical	Students' presentation for the case studies of rain gardens



13	Theoretical	Students` rain garden design
14	Theoretical	Students` rain garden design
15	Theoretical	Students` rain garden design
16	Theoretical	Final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	10	2	168
Assignment	2	4	1	10
Midterm Examination	1	9	1	10
Final Examination	1	11	1	12
Total Workload (Hours)				200
[Total Workload (Hours) / 25*] = ECTS				8

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	Learning the definition, function and benefits of green infrastructure systems
2	Learning the components and the planning stages of the green infrastructure system
3	Learning the definition, types, functions and benefits of rain gardens
4	Learning how to design rain gardens
5	Learning how to design rain gardens.

Programme Outcomes (*Landscape Architecture Master*)

1	e
2	e
3	e
4	e
5	e

Contribution of Learning Outcomes to Programme Outcomes 1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High

	L1	L2	L3	L4	L5
P2	5		4	5	5
P4		4			

