



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

Course Title	Decision Support Systems in Landscape Planning								
Course Code	ZPM536	Course Level			Second Cycle (Master's Degree)				
ECTS Credit	8	Workload	200 (Hours)	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	The aim of this course is to introduce the data collection and processing methods for spatial decision support systems in planning and management of natural and cultural landscapes and to introduce the importance of research and evaluation methods and decision support systems used in landscape planning								
Course Content	The production of data layers in the landscape planning process, the spatial decision support system, the multi-criteria evaluation method and the analytical hierarchy method are applied to give information about the land use decisions.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Individual Study								
Name of Lecturer(s)	Lec. Birsen KESGİN ATAĞ								

#### Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

#### Recommended or Required Reading

1	Malczewski, J. 1999. GIS and Multicriteria Decision Analysis
2	Malczewski, J. 1998. "Spatial Multi-Criteria Decision Analysis" in Thill, J-C (Ed. Spatial Multi-Criteria Decision Making and Analysis: A Geographic Information Sciences Approach. Brookfield, Ashgate: pp 11-48.
3	Nurlu E., 2002. Peyzaj Planlama Ders Notları. Ege Üniversitesi Ziraat Fakültesi Peyzaj Mimarlığı Bölümü, Bornova-İzmir
4	Peterson, K. 1998. Development of Spatial Decision Support Systems for Residential
5	Saaty, T. L., 1980. The Analytic Hierarchy Process. NY, McGraw Hill
6	Scholten, H. J., and Stillwell, J. C. H., editors, 1990. Geographical Information Systems for Urban and Regional Planning. Dordrecht: Kluwer Academic Publishers.

Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction to course: content, reason, importance, process method and needs.
2	Theoretical	Landscape Planning Approaches, Landscape components and data analysis
3	Theoretical	Decision Support Concept (DSS) and Geographic Information Systems (GIS)
4	Theoretical	Multicriteria Decision Analysis (MCDA): Explanation of the method
5	Theoretical	Analytic Hierarchy Process (AHP): Explanation of the method
6	Theoretical	Analytic Hierarchy Process (AHP): Explanation of the method
7	Theoretical	Multicriteria Decision Analysis (MCDA) and Analytic Hierarchy Process (AHP) advantage and disadvantage
8	Theoretical	Midterm exam
9	Theoretical	Multicriteria Decision Analysis (MCDA): Case studies
10	Theoretical	Multicriteria Decision Analysis (MCDA): Case studies
11	Theoretical	Analytic Hierarchy Process (AHP): Case studies
12	Theoretical	Analytic Hierarchy Process (AHP): Case studies
13	Theoretical	Multicriteria Decision Analysis (MCDA) and Analytic Hierarchy Process (AHP); result and evaluation
14	Theoretical	Multicriteria Decision Analysis (MCDA) and Analytic Hierarchy Process (AHP); result and evaluation
15	Theoretical	Multicriteria Decision Analysis (MCDA) and Analytic Hierarchy Process (AHP); result and evaluation
16	Final Exam	Final exam



**Workload Calculation**

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	8	3	154
Midterm Examination	1	20	1	21
Final Examination	1	24	1	25
Total Workload (Hours)				200
[Total Workload (Hours) / 25*] = <b>ECTS</b>				8

\*25 hour workload is accepted as 1 ECTS

**Learning Outcomes**

1	To be able to know the concepts about decision support system in landscape planning
2	To be able to learn important concepts for landscape planning in terms of conservation usage balance in natural and cultural resource values.
3	To be able to analyze multiple and complex data by multi evaluation methods.
4	To be able to make optimal land use decision on landscape planning process
5	To be able to know the development of the decision support system in the country and in the world.

**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
P1	4	4	4	4	4
P2	5	5	5	5	5
P3	5	5	5	5	5
P4	5	5	5	5	5
P5	2	2	2	2	2

