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

Course Title		Spatial Analysis Techniques of Landscapes						
Course Code		ZPM542		Couse Level		Second Cycle (Master's Degree)		
ECTS Credit	8	Workload	200 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course		This course aims to explain the theory and different practical skills for the analysis of the spatial structure and organization of the landscape that can be used in landscape planning studies.						
Course Content		Demonstration of some of the basic analysis that can be used in landscape planning by explaining the content of spatial analysis techniques and how to perform various spatial analysis.						
Work Placement		N/A						
Planned Learning Activities and Teaching Methods		Explanation (Presentation), Demonstration, Case Study, Project Based 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	Jensen J.R. and Jensen R.R. (2013) Introductory Geographic Information Systems, Upper Saddle River, New Jersey: Prentice Hall.
2	Heywood, I, Cornelius, S. and Carver, S. (2011) An Introduction to Geographical Information Systems, 4th Ed, Upper Saddle River, New Jersey: Prentice Hall.
3	Longley, P.A., Goodchild, M.F, Maguire, D.J. and Rhind, D.W. (2015) Geographic Information Systems and Science, 4rd ed., Chichester: Wiley.
4	Lo, C.P. and Yeung, A.K.W. (2007) Concepts and Techniques of Geographic Information Systems, 2nd ed., Upper Saddle River, New Jersey: Prentice-Hall.
5	Chang, K.T. (2015) Introduction to Geographic Information Systems, 8th ed., Boston: McGraw-Hill.

Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction to course: content, reason, importance, process method and needs
2	Theoretical	Introduction to spatial analysis: Deriving information from data, Identifying spatial relationships
3	Theoretical	Spatial analysis tools
4	Theoretical	Distance analysis
5	Theoretical	Density analysis
6	Theoretical	Surface Analysis
7	Theoretical	Conversion functions / Reclassify
8	Intermediate Exam	Midterm exam
9	Theoretical	Spatial statistics
10	Theoretical	Project based learning
11	Theoretical	Project based learning
12	Theoretical	Project based learning
13	Theoretical	Project based learning
14	Theoretical	Project based learning
15	Theoretical	Project based learning
16	Final Exam	Final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	4	2	84
Lecture - Practice	14	4	2	84

Assignment	2	4	1	10
Midterm Examination	1	10	1	11
Final Examination	1	10	1	11
			Total Workload (Hours)	200
			[Total Workload (Hours) / 25*] = **ECTS**	8

25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	To develop a deeper understanding of spatial data and principles of spatial analysis,
2	To develop a proficiency in the analysis and evaluation of spatial data,
3	To develop technical skills to structure spatial data analysis and modeling in planning,
4	To develop and improve spatial problem solving abilities through the application of GIS knowledge and spatial thinking skills.
5	To be able to produce landscape planning projects with spatial analysis techniques.

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	5	5	5	5	5
P2	4	4	4	4	4
P3	5	5	5	5	5
P4	5	5	5	5	5
P5	1	1	1	1	1