AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title		Geographic Information Systems in Land Development Services						
Course Code		ZTY538		Couse Level		Second Cycle (Master's Degree)		
ECTS Credit	8	Workload	200 *(Hours)*	Theory	2	Practice	2	Laboratory	0
Objectives of the Course		Teach use of geographic ınformation systems (GIS) in land development services						
Course Content		Geographic Information Systems (GIS) in land development services, data collection techniques, GIS techniques in land consolidation, spatial data modeling methods, introduction of data acquisition devices, evaluations of potential farm lands using GPS techniques.						
Work Placement		N/A						
Planned Learning Activities and Teaching Methods			Explanation (Presentation), Demonstration, Discussion, Case Study, Project Based Study, Individual Study, Problem Solving					
Name of Lecturer(s)								

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Keith C. Clarke, Geographic Information Systems and Environmental Modeling
2	Yomralıoğlu, T., 2002. Geographic Information Systems (Coğrafi Bilgi Sistemleri). Karadeniz Teknik Üniversitesi. Jeodezi ve Fotogrametri Mühendisliği Bölümü, Trabzon
3	Worboys M.F., 1995. GIS : A Computing Perspective. Department of Computer Science, Universty of Keele, Keele, UK. Taylor and Francis Ltd.1 Gunpowder Square, London EC4A 3DE. UK

Week	Weekly Detailed Course Contents	
1	Theoretical	Geographic Information Systems in Field Development Services
2	Theoretical	Spatial data acquisition techniques
3	Theoretical	Importance of GIS in Land Consolidation
4	Theoretical	Data modeling in GIS
5	Theoretical	Introduction of data collection devices
6	Theoretical	GPS technology
7	Theoretical	GIS and GPS integration
8	Intermediate Exam	Midterm Exam
9	Theoretical	Irrigation and Drainage System Monitoring and GIS
10	Theoretical	Assessment of collected data
11	Theoretical	Land development and spatial data modeling
12	Theoretical	Decision Support Systems for Irrigation techniques and GIS
13	Theoretical	Assessment of Farm production areas via GIS
14	Theoretical	Querying and reporting of geographic data
15	Final Exam	Final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	5	2	98
Lecture - Practice	14	4	2	84
Midterm Examination	1	6	2	8
Final Examination	1	8	2	10
			Total Workload (Hours)	200
			[Total Workload (Hours) / 25*] = **ECTS**	8

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	Learn the basic principles of Geographic Information System (GIS)
2	Learn to use geographic ınformation systems (GIS) in land consolidation
3	To learn GIS and GPS entegration
4	Ability to use GIS in irrigation and drainage system monitoring
5	To learn land development and spatial data modeling

Programme Outcomes *(Agricultural Structures and Irrigation Master)*

1	Ability to use, evaluate and improve the knowledge gained from field of study at an expert level
2	Ability to reach necessary the knowledge
3	To able to conduct scientific studies (research) related to the field
4	Ability to consider academical and ethical values the studies
5	Ability to improve editing method and evaluate the results of researches
6	The studies, the ability to reach result and application, develop new approaches
7	A topic in the field of written, verbally and visually as the ability to express
8	Effective use of Turkish language and ability to communicate in a foreign language both written and verbal

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	5	4	5	4
P2	5	5	5	5	5
P3	4	5	5	5	5
P4	2	4	4	4	4
P5	4	5	5	5	5
P6	5	5	5	5	5
P7	2	2	2	2	2
P8	1	1	1	1	1