REMOTE SENSING AND GIS IN LANDSCAPE PLANNING

1	Course Title:	REMOTE SENSING AND GIS IN LANDSCAPE PLANNING	
2	Course Code:	PYZ3008	
3	Type of Course:	Compulsory	
4	Level of Course:	First Cycle	
5	Year of Study:	3	
6	Semester:	6	
7	ECTS Credits Allocated:	3.00	
8	Theoretical (hour/week):	1.00	
9	Practice (hour/week):	2.00	
10	Laboratory (hour/week):	0	
11	Prerequisites:	None	
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Prof. Dr. Murat Zencirkıran	
15	Course Lecturers:		
16	Contact information of the Course Coordinator:	Prof.Dr.Murat ZENCİRKIRAN Bursa Uludağ Üniversitesi Ziraat Fakültesi Peyzaj Mimarlığı Bölümü 16059 Görükle/Bursa Tel: 0 224 294 1482 Fax: 0 224 294 1637 e-posta: mzencirkiran@uludag.edu.tr	
17	Website:		
18	Objective of the Course:	The aim of the course is to teach the concept of Remote Sensing, basic principles of remote sensing, recognition of satellite technologies and data, basic functions of GIS components and GIS systems, GIS database, GIS application areas, Geographic Information Systems Programs.	
19	Contribution of the Course to Professional Development:		
20	Learning Outcomes:		
		1	To be able to understand the concept of remote sensing
		2	To be able to learn GIS components and basic functions of GIS systems
		3	To be able to comprehend GIS application areas
		4	To be able to learn Geographical Information Systems Programs
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21	Course Content:		

Course Content:

Week	Theoretical	Practice

1	GIS definition, application area and components	Literature research
2	Map projection systems	Literature research
3	Raster and vector data representations, data structure topology at GIS	Literature research
4	Introduction to spatial analysis in CBS, point pattern analysis and statistical methods in GIS	Literature research, data collection
5	Linear analysis in GIS (network analysis) Surface analysis in GIS, topographic analysis	Evaluation of data
6	Surface analysis in GIS, topographic analysis, introduction of ArcGIS software	Evaluation of data
7	Interpolation techniques and geo-statistics application	Evaluation
8	Single-layer and multi-layer analyzes in GIS.	Data analysis and planning project implementation
9	Single-layer and multi-layer analyzes in GIS.	Data analysis and planning project implementation
10	Application project including digitization, distance analysis, registration, classification and database creation	Data analysis and planning project implementation
11	Environmental modeling, definition, components and types in GIS	Planning project implementation
12	Examples of environmental modeling in GIS	Planning project implementation
13	Examples of environmental modeling in GIS	Planning project implementation
14	GPS and its applications	Planning project implementation

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	1.00	14.00
Practicals/Labs	14	2.00	28.00
Self study and preperation	6	3.00	18.00
Homeworks	0	0.00	0.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	14.00	14.00
Others	0	0.00	0.00
Final Exams	1	14.00	14.00
Total Work Load			88.00
Total work load/ 30 hr			2.93
ECTS Credit of the Course			3.00

23	Assesment Midterm Exam 1 40.00 Home work-project 0 0.00 Total 2 100.00 Success Grade Total Measurement and Evaluation Techniques Used in the Course
24	**ECTS / WORK LOAD TABLE**

25	**CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS**															
	PQ1	**PQ2**	**PQ3**	**PQ4**	**PQ5**	**PQ6**	**PQ7**	**PQ8**	**PQ9**	**PQ10**	**PQ11**	**PQ12**	**PQ13**	**PQ14**	**PQ15**	**PQ16**
ÖK1	0	5	5	0	0	5	3	0	0	0	0	0	0	0	0	0
ÖK2	0	5	5	0	0	5	5	0	0	0	0	0	0	0	0	0
ÖK3	0	5	5	0	0	4	5	0	0	0	0	0	0	0	0	0

ÖK4	0	5	5	0	0	5	5	0	0	0	0	0	0	0	0	0

LO: Learning Objectives PQ: Program Qualifications					
Contribution Level:	**1 very low**	**2 low**	**3 Medium**	**4 High**	**5 Very High**