

GEOGRAPHIC INFORMATION SYSTEMS APPLICATIONS IN ENVIRONMENTAL ENGINEERING

1	Course Title:	GEOGRAPHIC INFORMATION SYSTEMS APPLICATIONS IN ENVIRONMENTAL ENGINEERING	
2	Course Code:	CEV3063	
3	Type of Course:	Optional	
4	Level of Course:	First Cycle	
5	Year of Study:	3	
6	Semester:	5	
7	ECTS Credits Allocated:	3.00	
8	Theoretical (hour/week):	2.00	
9	Practice (hour/week):	0.00	
10	Laboratory (hour/week):	0	
11	Prerequisites:	None	
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Dr. Öğr. Üyesi Aslıhan KATİP	
15	Course Lecturers:		
16	Contact information of the Course Coordinator:	aballi@uludag.edu.tr	
17	Website:		
18	Objective of the Course:	Creation of data with spatial definition for solving complex planning and management problems, representation and give the ability to analyze, show examples of applications in different environmental engineering issues using these data and to teach the use of geographic information system software for it.	
19	Contribution of the Course to Professional Development:		
20	Learning Outcomes:		
		1	Understand the logic of geographic information systems,
		2	Use the geographic data base
		3	Learn the using applications in Environmental Engineering issues and develops the ability to use computer technology.
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21	Course Content:		
		Course Content:	
Week	Theoretical	Practice	
1	Introducing the Course		
2	Introduction to Geographic Information Systems		
3	Base map information		

4	Spatial data and basic data types	
5	The introduction of the software to be used with the main line	
6	Spatial data representation	
7	The creation of spatial data	
8	Spatial data processing	
9	Spatial data presentation	
10	Midterm and Spatial analysis-1	
11	Spatial analysis-2	
12	Spatial analysis-3	
13	Applications in Environmental Engineering issues-1	
14	Applications in Environmental Engineering issues-2	
22	Textbooks, References and/or Other Materials:	1.Lecture notes compiled from internet resources and articles. 2.Coğrafi Bilgi Sistemleri Temel Kavramlar ve Uygulamalar Prof. Dr. Tahsin Yomralıoğlu Akademi Kitabevi 3. Getting to Know ArcGIS Desktop Tim Ormsby, Eileen Napoleon, Robert Burke, Carolyn Groessl, Laura Bowden, ESRI Press
23	Assesment	
TERM LEARNING ACTIVITIES		
	NUMBER	WEIGHT
Midterm Exam	1	40.00
Quiz	0	0.00
Home work-project	0	0.00
Final Exam	1	60.00
Total	2	100.00
Contribution of Term (Year) Learning Activities to Success Grade		40.00
Contribution of Final Exam to Success Grade		60.00
Total		100.00
Measurement and Evaluation Techniques Used in the Course		
24	ECTS / WORK LOAD TABLE	

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	2.00	28.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	20	2.00	40.00
Homeworks	0	0.00	0.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	10.00	10.00
Others	0	0.00	0.00
Final Exams	1	13.00	13.00
Total Work Load			91.00
Total work load/ 30 hr			3.03
ECTS Credit of the Course			3.00

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	0	5	0	0	0	5	0	0	0	0	0	0	0	0
ÖK2	0	5	0	5	0	0	0	5	0	0	0	0	0	0	0	0
ÖK3	0	5	0	5	0	0	0	5	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			