



EK-3

**CUMHURİYET UNIVERSITY ENGINEERING FACULTY****Environmental Engineering Department Course Information Form**

<b>Department</b>	<b>Environmental Engineering</b>		
<b>Semestr/Year</b>	<b>1/3</b>		
<b>Name of Course</b>	<b>Environmental Resources</b>		
<b>Level of Course</b>	<b>Undergraduate</b>		
<b>Mandatory / Selective of Course</b>	<b>Selective</b>		
<b>Language of Course</b>	<b>Turkish</b>		
<b>Code</b>	<b>Env. 3011</b>		
<b>(T+P) hours</b>	<b>2+0</b>		
<b>Credit</b>	<b>2</b>		
<b>ECTS</b>	<b>5</b>		
<b>Prerequest Courses</b>	<b>none</b>		
<b>Category of Course</b>	<b>Environmental Science</b>		
<b>Course Coordinator</b>	Prof. Dr. Ali YILMAZ	e-mail:ayilmaz	Phone:1298
<b>Course Lecturer</b>	Prof. Dr. Ali YILMAZ		
<b>Other Supplementary Lecturers</b>	<b>none</b>		
<b>Course Objectives</b>	This course aims to contribute teaching main informations on environmental resources and their impacts on the environment during the query operation and using processes and controlling.		
<b>Course Content</b>	Introduction concepts of environmental resources, Resource definition-materyal or functional, Types of environmental resources, Creation and destruction of environmental resources, Resource scarcity and sustainability, Environmental resources in space and time, Mineral resources (gold, iron, cupper, zinc, lead, cromite), Industrial materials (clays,		

	evaporates, zeolites marble, asbestos, perlites), Energy resources (coal, oil and renewable resources), Environmental wealth and limits to growth.
<b>Education System</b>	

<b>WEEKLY BASED COURSE CONTENTS</b>		
<b>Week</b>	<b>Detailed Content</b>	<b>Suggested preliminary preparation (name, page no, etc)</b>
<b>Week 1</b>	Introduction concepts of environmental resources, Resource definition-materyal or functional, Types of environmental resources,	Yılmaz, A., 2009, Çevre Kaynakları (Environmental Resources), CÜ yayını, no 117, Sivas.
<b>Week 2</b>	Metal resources I: Gold, cupper, lead,	
<b>Week 3</b>	Metal resources II: Zinc, iron, cromite,	
<b>Week 4</b>	Industrial materials I: Clays, evaporates,	
<b>Week 5</b>	Industrial materials II: Zeolites, marble,	
<b>Week 6</b>	Industrial materials III: Asbestos, perlite, pumice, diatomite,	
<b>Week 7</b>	Midterm exam	
<b>Week 8</b>	Energy resources I: Fossil resources: coal, oil and natural gas,	
<b>Week 9</b>	Energy resources II: Biogas,	
<b>Week10</b>	Energy resources III: Nuclear energy,	
<b>Week11</b>	Renewable energy resources I: Geothermal energy,	
<b>Week12</b>	Renewable energy resources II: Sun and wind energy,	
<b>Week13</b>	Renewable energy resources III: Hydrogene energy;	
<b>Week14</b>	Environmental wealth and limits to growth.	

SHARING EDUCATION MATERIAL AND ADVANCED SOURCES	
<b>Education Materials and Course Notes</b>	Homeworks and seminars are encouraged to improve student interactions.
<b>Advanced Sources</b>	Mather, A.S. ve Chapman, K., 1998, Environmental Resources. Addison Wesley Longman Singapore Pte Ltd., 279s.
<b>Solution of Examination</b>	In the frame of relative evaluation, students must score minimum 45 over 100, during not only mean of midterm and final exams but also during final exam.

LEARNING OUTCOMES OF THE COURSE AND CONTRIBUTION OF PROGRAM LEARNING OUTCOMES			
Program Learning Outcomes*	Knowledge and Skills earned	CPLOC	MEM
LO-1			
LO-2			
LO-3			
LO-4			
LO-5			
LO-6			
LO-7			

*LO: Learning Outcomes of Course*  
*CPLOC: Code of Program Learning Outcome that contributed*  
*MEM: Measurement and Evaluation Method*

\* Learning Outcomes of Course (LO) shouldn't exceed 10

CONTRIBUTION LEVEL OF COURSE TO PROGRAM OUTCOMES						
No	Program Learning Outcomes *	Contribution level **				
		1	2	3	4	5
P1						

P2						
P3						
P4						
P5						
P6						
P7						
P8						
P9						
P10						
P11						

\* iProgram outcomes must be in the range of 8 – 14.      \*\* at least=1

METHODS OF MEASUREMENT AND EVALUATION			
Method	Number	Date	Contribution ratio
Midterm			
Short exam			
Final Exam			
Homework			

ECTS/ WORK LOAD TABLE			
Efforts required for the course	Number	Time (hour)	Total work load (hour)
Lecture hours (Including exam week.i.e., 16x total lecture hours)			
Study hours of student out of lecture hours			
Short exams			
Preparation for midterm			
Midterm			
Preparation for final			

<b>exam</b>			
<b>Final exam</b>			
			<b>Total work load</b>
			<b>Total work load /30 (h)</b>
			<b>ECTS credit of course</b>