AIR POLLUTION CONTROL ENGINEERING

1	Course Title:	AIR POLLUTION CONTROL ENGINEERING
2	Course Code:	CEV3032E
3	Type of Course:	Compulsory
4	Level of Course:	First Cycle
5	Year of Study:	3
6	Semester:	6
7	ECTS Credits Allocated:	4.00
8	Theoretical (hour/week):	2.00
9	Practice (hour/week):	1.00
10	Laboratory (hour/week):	0
11	Prerequisites:	None
12	Language:	English
13	Mode of Delivery:	Face to face
14	Course Coordinator:	Prof. Dr. S.SIDDIK CİNDORUK
15	Course Lecturers:	Yok
16	Contact information of the Course Coordinator:	Prof.Dr. S.Sıddık CİNDORUK Bursa Uludağ Üniv. Müh. Fak. Çevre Müh. Böl. Tel: 2942114 E-mail: cindoruk@uludag.edu.tr
17	Website:	
18	Objective of the Course:	The course provides necessary knowledge to evaluate and to explain data taken from engineering practices.
19	Contribution of the Course to Professional Development:	With the gains in this course, the environmental engineer will be able to reach theoretical knowledge that can make technological designs for the control of air pollution and will be able to closely follow current developments in English terms.
20	Learning Outcomes:	

	1	To have knowledge about air pollution control strategies.
	2	To define basic removal mechanisms /events of gas and particulate matters.
	3	To have knowledge of air pollution control equipments.
	4	To design basic treatment methods of gas and particulate matter removal, and practice design parameters.
	5	
	6	
	7	
	8	
	9	
	10	

21	Course Content:

Course Content:

Week	Theoretical	Practice
1	Introduction, Air Pollution Control Strategies	Examples Practices
2	Investigation of Particle Characteristics	Examples Practices
3	Settling Chambers	Examples Practices

4	Cyclones	Examples Practices
5	Filters	Examples Practices
6	Electrostatic Precipitators	Examples Practices
7	Wet Scrubbers	Examples Practices
8	Diffusion, Mass Transfer, 2-Film Theory	Examples Practices
9	Gas Absorption	Examples Practices
10	Gas Adsorption	Examples Practices
11	Condensation	Examples Practices
12	Combustion	Examples Practices
13	NOx/SOx Removal	Examples Practices
14	Traffic Emission Control	Examples Practices

| 22 | Textbooks, References and/or Other Materials: | 1. Schnelle, Karl B., Air Pollution Control Technology Handbook
2. De Nevers N., Air Pollution Control Engineering, Mc Graw Hill, (1998).
3. Ferruh Ertürk, Hava Kirliliğinde Partikül ve Atık Gaz Kontrolü, Yıldız Teknik Üniversitesi Ders Notları (in Turkish). |

| 23 | Assesment | |

TERM LEARNING ACTIVITIES	NUMBER	WEIGHT
Midterm Exam	1	30.00

Activites		Number	Duration (hour)	Total Work Load (hour)
Theoretical / Final Exam	1	60 / 14	2.00	28.00
Practicals/Labs		14	1.00	14.00
Self study and preparation / Sensitivity of Term Learning Activities to		40 / 14	3.00	42.00
Homeworks		2	5.00	10.00
Projects / Contribution of Final Exam to Success Grade		60.00 / 0	0.00	0.00
Field Studies		0	0.00	0.00
Midterm exams / Measurement and Evaluation Techniques Used in the		1 / Homework, Quiz, Midterm Exam, Final Exam	5.00	5.00
Others		0	0.00	0.00
Final Exams / 24 ECTS / WORK LOAD TABLE		1	20.00	20.00
Total Work Load				119.00
Total work load/ 30 hr				3.97
ECTS Credit of the Course				4.00

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	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK2	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK3	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖK4	0	0	0	0	0	0	0	0	0	0	4	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

Contribution Level:	1 very low	2 low	3 Medium	4 High	5 Very High