



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Chemical Wastes and Environmental Pollution							
Course Code		FBÖ456		Course Level		First Cycle (Bachelor's Degree)			
ECTS Credit	4	Workload	100 (<i>Hours</i>)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		To give information about chemistry of environmental processes and analysis of environmental samples from both environmental problems and their control of view and to teach basic principles and experimental methods in environmental chemistry.							
Course Content		To give information about chemistry of environmental processes and analysis of environmental samples from both environmental problems and their control of view and to teach basic principles and experimental methods in environmental chemistry.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Discussion, Individual Study					
Name of Lecturer(s)		Assoc. Prof. Burak FEYZİOĞLU							

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

Recommended or Required Reading

1	Sevinç, V. (editör), Genel Çevre Bilimi, Maya Akademi, İstanbul, 2009
2	Özer, U., Çevre Bilimlerine Giriş, Uludağ Üniversitesi Basımevi, Bursa

Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction to environmental sciences, Basic concepts of environment, A general view of environmental problems
2	Theoretical	Air pollution: Air pollutants (nitrous oxides, hydrocarbons, halocarbons, carbonmonoxide, sulfuroxides, particules)
3	Theoretical	Measurement of air pollution: Determination of particules, measurement of smokes, measurement of gases
4	Theoretical	Global effects of air pollution: The ozone layer problem, global warming
5	Theoretical	Water pollution: Water pollutants (organic based, microorganisms, those that cause epidemic disease, etc)
6	Theoretical	Measurement of water pollution
7	Theoretical	Drinking water standarts
8	Intermediate Exam	Midterm
9	Theoretical	Waste waters and waste water treatments (physical, chemical, advanced)
10	Theoretical	Soil pollution: Soil pollutants (solid wastes, treatment plant sluges, pesticides etc)
11	Theoretical	Radioactive pollution: Nucleer reactors and wastes
12	Theoretical	Metalic pollutants and environment (mercury, lead poisoning)
13	Theoretical	Petroleum and environment
14	Theoretical	Recovery
15	Theoretical	Sharing
16	Final Exam	Final

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	2	42
Assignment	14	1	1	28
Individual Work	12	0	1	12
Midterm Examination	1	6	1	7



Final Examination	1	10	1	11
Total Workload (Hours)				100
[Total Workload (Hours) / 25*] = ECTS				4
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	He/She will be able to explain pollution and pollution parameters
2	He/She will be able to interpret global effects of environmental pollutants
3	He/She will be able to interpret environmental standards
4	He/She will be able to define and categorize environmental pollutants
5	He/She will be able to formulate chemical mechanism of environmental pollutants

Programme Outcomes (Science Teacher Education)

1	To be able to gain subject knowledge of profession in theory and practice in the learning process.
2	To be able to gain the competence of using the appropriate approach, strategy, method and technique for the instructional plans to be prepared in the learning process.
3	To be able to gain the skills of the teaching profession in the learning process.
4	To be able to implement teaching profession knowledge, skills, attitudes and habits related to the subject-matter in a real teaching and learning environment in the learning process.
5	To be able to comprehend contemporary approaches of education and the philosophy they are based on.
6	To be able to gain the basic skills such as comprehending, expressing, commenting, evaluating, being aware and enterprising, communicating, acknowledging the individual related to the subject-matter.
7	To be able to become individuals faithful to the Principles and Revolutions of Atatürk, be modern democratic, secular, protecting and developing one's country, being alive to the nation, respecting human rights, preserving the nature, not being discriminatory, giving importance to the traditions and customs, protecting the values
8	To be able to improve oneself in terms of sport, art and culture.
9	To be able to become individuals believing in lifelong learning.
10	To be able to gain the vision of being individuals who keep up with developments in social, economic, technological and scientific areas, who investigate the main reasons of World problems and try to contribute to the solutions of these problems.

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	5	5	5
P2	4	5	4	5	5
P3	4	5	5	5	5
P4	5	5	5	4	5
P5	5	5	5	4	5
P6	4	4	4	5	5
P7	4	4	4	5	
P8	5	4	4	4	5
P9	5	5	5	4	
P10		5	4	5	5

