



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Environmental Chemistry							
Course Code		KİM506		Couse Level		Second Cycle (Master's Degree)			
ECTS Credit	6	Workload	148 (Hours)	Theory	3	Practice	0	Laboratory	0
Objectives of the Course		To give information about the sources of environmental pollution, environmental damage and their removal methods, water pollution, atmospheric pollution, soil pollution, solid waste pollution, toxic metal pollution							
Course Content		Fundamental concepts of the environmental chemistry. Water, atmosphere and soil chemistry.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Project Based Study					
Name of Lecturer(s)									

### Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	20
Final Examination	1	60
Seminar	3	20

### Recommended or Required Reading

1	Manahan S. E. (1993), Fundamentals of environmental chemistry, Lewis Publishers
2	Bodek I., Lyman W. J., Reehl W. F., Rosenblatt, (1988) Environmental inorganic chemistry, Pergamon pres
3	Evangelov V. P. (1998), Environmental soil and water chemistry, John Wiley & Sons

Week	Weekly Detailed Course Contents	
1	Theoretical	Environmental Chemistry and Content
2	Theoretical	Environment and Ecology
3	Theoretical	Environmental Chemistry of Water and Chemical Equilibria
4	Theoretical	Basic Chemical Events in Dirty Waters and Processing of Water
5	Theoretical	Sediments and Nature of Solids
6	Theoretical	Soil Pollution and Chemical Events in the Soil
7	Theoretical	Atmosphere and atmospheric chemistry
8	Intermediate Exam	Midterm Exam
9	Theoretical	Inorganic Air Pollutants
10	Theoretical	The nature of dangerous Substances, sources and environmental chemistry
11	Theoretical	toxicological chemistry
12	Theoretical	acid rain and ozone depletion
13	Theoretical	Student presentations
15	Theoretical	Student presentations
16	Final Exam	Final Exam

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	3	42
Seminar	3	25	1	78
Midterm Examination	1	10	1	11
Final Examination	1	15	2	17
Total Workload (Hours)				148
[Total Workload (Hours) / 25*] = ECTS				6

\*25 hour workload is accepted as 1 ECTS



**Learning Outcomes**

1	to be able to recognize water, soil and air quality parameters
2	to be able to find out the basic information about treatment processes
3	to be able to recognize the environmental problems and sources
4	Learning the basic concepts of environmental chemistry.
5	To learn the relationship between chemistry and events in water, atmosphere and soil.

**Programme Outcomes (Chemistry Master)**

1	To be able to gain proficiency in depths and analysis by statistical methods in the same or a related area depending on the undergraduate competence,.
2	To be able to use the knowledge of his/her field and the skills to solve problems and/or applications in interdisciplinary research.
3	To be able to adopt to evaluate the information and skill his/her field by critical approach.
4	To be able to evaluate the effect of important persons, case and fact on his/her field applications.
5	To be able to gain the ability to discuss write and orally present to a group of literate listener.
6	To be able to communicate orally and written in a foreign language at least at European language B2 level.
7	To be able to use computer programs related to his/her field and have skills for informatics communication.
8	To be able to be careful in protecting social, scientific and cultural ethics in collection data, application and presentation.
9	To be able to develop strategic, political and application plans in his/her field and may evaluate the outcomes in quality periods.

**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	4	4	4
P2	4	5	4	4	4
P3	4	5	4	4	4
P4	4	5	4	4	4
P5	4	5	4	4	4

