



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Special Topics in Chemistry							
Course Code		FBÖ305		Couese Level		First Cycle (Bachelor's Degree)			
ECTS Credit	3	Workload	76 (<i>Hours</i>)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		Understands the importance and relationships between chemistry, environment and daily life.							
Course Content		Formation and structure of the atmosphere, air pollution, nuclear power generation, water pollution, pollutant from industry and agriculture, the relation between chemistry and environment, chemistry and food, chemistry industry, environmental chemistry.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Project Based Study, Problem Solving					
Name of Lecturer(s)									

Assessment Methods and Criteria

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

Recommended or Required Reading

1	Herr, N. & Cunningham, J. (1999). Hands-On Chemistry Activities with Real-Life Applications, Jossey-Bass, San Francisco.
2	Ronis, D.L. (2008). Problem-Based Learning for Math & Science, Corwin Press.
3	Lechtanski, V.L. (2000); Inquiry-based experiments in chemistry, Oxford University Press.

Week	Weekly Detailed Course Contents	
1	Theoretical	Air pollution (acid rains, photochemical smog and pollution its controls)
	Preparation Work	
2	Theoretical	Our health and chemical glance to our food
	Preparation Work	
3	Theoretical	Enthalpy Sources of our world.
	Preparation Work	
4	Theoretical	Green house gases and their Importance.
	Preparation Work	
5	Theoretical	From the river water to drink water.
	Preparation Work	
6	Theoretical	Glass and Ceramics.
	Preparation Work	
7	Theoretical	Relation between visual art and Chemical. Photochemistry.
	Preparation Work	
8	Theoretical	Corrosion chemistry, biological process and balance.
	Preparation Work	
9	Intermediate Exam	Midterm exam
10	Theoretical	Drugs Treatment and chemistry (Blood Chemistry)
	Preparation Work	
11	Theoretical	Chemical Cleaners, its used very useful.
	Preparation Work	
12	Theoretical	Carbon Chemistry.
	Preparation Work	
13	Theoretical	Chemistry in life process.
	Preparation Work	
14	Theoretical	In life process environmental chemistry and environmental problems.
	Preparation Work	



15	Theoretical	Chemical pollution and Nuclear Power
	Preparation Work	
16	Final Exam	Final exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Reading	12	0	3	36
Midterm Examination	1	4	1	5
Final Examination	1	6	1	7
Total Workload (Hours)				76
[Total Workload (Hours) / 25*] = ECTS				3

*25 hour workload is accepted as 1 ECTS

Learning Outcomes

1	Understanding of scientific thinking and inquiring relation with daily life.
2	Know the structure and formation of the atmosphere
3	Know air pollution, water pollution and waste pollution and will be able to suggest solution
4	Know the relation between chemistry and environment
5	Know chemistry industry and effects on our life

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	4	5	5	4
P3	4	4	4	4	5
P4	5	4	4	5	5
P6	4	4	5	5	4

