

# AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title	Environmenta	l Toxicology						
Course Code ÇS209		Couse Level		Short Cycle (Associate's Degree)				
ECTS Credit 3	Workload	75 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course To give information about environmental pollution and toxicity and to gain basic skills about environmental toxicology								
Course Content  Toxicology, General Concepts, Classification of toxic substances according to Chemical Structure, Effect of metal contaminants, Gas and particulate contaminants in air, The toxic effect of organic solvents, Important toxic substances in used industry.								
Work Placement	N/A							
Planned Learning Activities and Teaching Methods		Explanation	(Presenta	tion), Discussi	on, Case St	udy		
Name of Lecturer(s)	Ins. Nimet KIL	IÇ						

Assessment Methods and Criteria						
Method	Quantity	Percentage (%)				
Midterm Examination	1	40				
Final Examination	1	70				

### **Recommended or Required Reading**

- 2 2. Çepel N., Ekolojik sorunlar ve Çözümleri; Tubitak Popüler Bilim Kitapları, 2002

Week	Weekly Detailed Cour	se Contents							
1	Theoretical	Definition andHistoryof toxicology							
	Preparation Work	Projection apparatus, slate, supporter books							
2	Theoretical	Toxicology,General Concepts,							
	Preparation Work	Projection apparatus, slate, supporter books							
3	Theoretical	Classification of toxic substances according to Chemical Structure							
	Preparation Work	Projection apparatus, slate, supporter books							
4	Theoretical	The ROUTE of toxic substances to live organisms							
	Preparation Work	Projection apparatus, slate, supporter books							
5	Theoretical	Assesment of toxic impact							
	Preparation Work	Projection apparatus, slate, supporter books							
6	Theoretical	Mutagen and Teratogen substances, chemical karsinogens							
	Preparation Work	Projection apparatus, slate, supporter books							
7	Theoretical	Chemical substances in the surrounding abiotic and contaminants							
	Preparation Work	Projection apparatus, slate, supporter books							
8	Intermediate Exam	Midterm							
9	Theoretical	Effect of metal contaminants							
	Preparation Work	Projection apparatus, slate, supporter books							
10	Theoretical	Gas and particulate contaminants in air							
	Preparation Work	Projection apparatus, slate, supporter books							
11	Theoretical	Thetoxic effect of organic solvents							
	Preparation Work	Projection apparatus, slate, supporter books							
12	Theoretical	Pesticides and soil pollutants							
	Preparation Work	Projection apparatus, slate, supporter books							
13	Theoretical	Behavior of Pesticides in the surrounding of Biotic and abiotic							
	Preparation Work	Projection apparatus, slate, supporter books							
14	Theoretical	Radiation andToxicology of radioactive isotopes							
	Preparation Work	Projection apparatus, slate, supporter books							



15	Theoretical	Important toxic substances in used industry
	Preparation Work	Projection apparatus, slate, supporter books

Workload Calculation					
Activity	Quantity Preparation		Duration	Total Workload	
Lecture - Theory	14		0	2	28
Assignment	7		2	1	21
Reading	1		0	8	8
Midterm Examination	1		6	1	7
Final Examination	1		10	1	11
	75				
	3				
*25 hour workload is accepted as 1 ECTS					

#### **Learning Outcomes**

- 1. Define Venom and poison, the active ingredient and the sources of lead poisoning, diagnostic and therapeutic approaches comments.
- 3 3. Define Toxicmode of action
- 4. Recognize the effects of metallic pollutants.
- 5. Recognize the effects of gaspollutants in the air.
- 6 6. Recognize the effects of dust in theair pollutants.
- 7 Recognizes the toxic effects of organic solvents.
- 8 8. List important issue of toxic substances used in industry reviews.

#### **Programme Outcomes** (Environmental Health)

- They have the appropriate level of knowledge about the basic sciences which has an interaction with the environment and the environment itself.
- They have gained the basic concepts, skills and qualifications in the Environmental health theorical and practical lessons. And then they can establish the connections that are necessary to protect the environment and people's health in the light of these competencies.
- They can use the approaches and the information of basic and applied research in different disciplines. They can follow the innovations and developments in their field, and have self-development competency with the terms of the day.
- They know and apply the analysis methods used in the evaluation of environmental factors (drinking water, waste water treatment, air pollution, meteorological data, land values, food control, radiation measurement, etc.).
- They have a professional and ethical consciousness, and have the ability to recognize the environmental problems and also can formulate a solution to these problems. They apply the gained knowledges and skills faced in real life situations, transfers the knowledge to individuals around, and wins the life-long learning behavior.
- They are able to use their professional knowledge in their lives and behave sensitively toward the local and global environmental problems and effectively uses to the legislation and management tools the necessary for the solution.
- Gained the ability to adapt the changing in a positive way themselves, to understand the core values and cultures of the society which are living. Sensitive to the universal and the social values, interests of the country, have adopted the concept of sustainable development, environmentally conscious, productive, behaves aware of the ethical and professional responsibility.
- Provides a healthy interact of individual, society and the environment and take responsibility in the necessary situations for the continuity.
- They gain the ecologically-based solving skills the problems and the delays that may arise in interaction with each other of living and nonliving environment. Interests of local and national, and Ecological and historical values of our country, and contribute to the protection and the development of them.
- Exhibits the appropriate behaviours for the protection and the development of plants, animals, and inanimate environment, and the especially human health.
- 11 Knows the value of energy for life, recognizes the types of energy, and have conscious of the importance, using and dissemination of renewable energy sources.
- Knows the properties of information and communication technologies, and uses them in the process efficiently and professionally.
- They aware of the democracy, rule of law, human rights, the national and universal cultural characteristics, and sensitive towards to the nature, society and people.
- 14 Knows the importance of Ataturk's principles and reforms, make them a way of life.
- 15 Uses effectively the Turkish in speaking and writing.
- Has at least one foreign language ability to be able to follow the knowledge in their profession and to communicate with colleagues.



To have the appropriate knowledge of medical sciences at the level of interest, to use specific medical terms and terminology of field

## Contribution of Learning Outcomes to Programme Outcomes 1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High

	L1	L2	L3	L4	L5	L6	L7	L8
P1	4	4	4	4	4	4	4	4
P2	4	4	4	4	4	4	4	4
P3	4	4	4	4	4	4	4	4
P5	4	4	4	4	4	4	4	4
P6	4	4	4	4	4	4	4	4
P8	5	5	5	5	5	5	5	5
P10	4	4	4	4	4	4	4	4
P13	4	4	4	4	4	4	4	4

