AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Toxicology								
Course Code	TL301		Couse Level		Short Cycle (Associate's Degree)				
ECTS Credit	3	Workload	75 *(Hours)*	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	Toxin, toxicity, Majorclasses of environmental contaminants. Uptake, biotransformation, detoxification, elimination and accumulation of toxicants. To give the necessary information on hygiene and working environment								
Course Content	Toxic substances in the body in, distribution, biotransformation and excretion, effect of poisonsshapes, lead, mercury, arsenic, antimony, cadmium, barium, etc.,and metal salts, carbonmonoxide, hidrojen siyanür, sulfurhydrogen, phosgenegases, etc., hydrocarbons, halogenatedaliphatichydrocarbons, aromatic hydrocarbons , aliphatic aromatic amines, alcohols, esters, aminesandorganicsulfurcompounds, toxicity, effecttypes, and hygienic conditions.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Case Study, Individual Study								
Name of Lecturer(s)									

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading	
1	Toksikoloji ,Prof.Dr.Nevin VURAL,Ankara Universitesi Eczacilik Fakültesi Yayınları No: 73, 2005

Week	Weekly Detailed Course Contents	
1	Theoretical	Definition and History of toxicology, toxicology,General Concepts, Place of Toxicology in Environmental Engineering
2	Theoretical	Classification of toxic substances according to Chemical Structure
3	Theoretical	The ROUTE of toxic substances to live organisms
4	Theoretical	Assesment of toxic impact
5	Theoretical	Mutagen and Teratogen substances, chemical karsinogens
6	Theoretical	Chemical substances in the surrounding abiotic and contaminants
7	Theoretical	Effect of metal contaminants
8	Theoretical	Gas and particulate contaminants in air
9	Theoretical	The toxic effect of organic solvents
10	Theoretical	Pesticides and soil pollutants
11	Theoretical	Behavior of Pesticides in the surrounding of Biotic and abiotic
12	Theoretical	Radiation and Toxicology of radioactive isotopes
13	Theoretical	İmportant toxic substances in used industry
14	Theoretical	İmportant toxic substances in used industry

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	2	28
Assignment	14	0	3	42
Midterm Examination	1	1	2	3
Final Examination	1	0	2	2
			Total Workload (Hours)	75
			[Total Workload (Hours) / 25*] = **ECTS**	3
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	1.Define Venom and poison, the active ingredient and the sources of leadpoisoning, diagnostic and the rapeutic approachescomments.
2	2.Define toxic Substances to explain theissue of ways to access the live organism
3	3.Define Toxic mode of action
4	4.Recognize the effects of metallic pollutants.
5	Recognize the effects of gaspollutants in theair.
6	Recognize the effects of dust in theairpollutants
7	Recognizes the toxic effects of organic solvents.
8	List importantissue of toxic substances used in industry reviews.

Programme Outcomes *(Medical Laboratory Techniques)*	
1	Understands the basic operation, organization, and safety rules of the medical laboratory; takes personal safety precautions and ensures a safe laboratory environment.
2	Accepts samples in the medical laboratory, performs pre-analysis preparation, ensures proper transfer conditions, and delivers results.
3	Performs basic tests in various fields of the medical laboratory, prepares analytical solutions, and effectively uses devices and techniques involved in the analysis process.
4	Applies disinfection and sterilization techniques, ensures laboratory hygiene, and complies with waste management procedures.
5	Evaluates and interprets the results of analyses and prepares laboratory reports in accordance with professional ethical principles.
6	Possesses fundamental knowledge of health sciences and effectively uses medical terminology in professional applications.
7	Communicates effectively in healthcare services, works well in teams, and uses Turkish proficiently; has a basic level of foreign language proficiency in professional applications. Embraces Atatürk's principles and reforms, adopts national, moral, spiritual, and cultural values, and maintains an open perspective toward universal and contemporary developments.
8	Keeps up with advancements in science and technology, continuously updates professional knowledge and skills, and engages in self-improvement.
9	Is aware of individual and public health, environmental protection, and occupational safety issues and fulfills responsibilities in these areas.
10	Possesses awareness of career management and lifelong learning within an academic context.

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	5	5	5	4	4	3	4	5
P2	4	5	4	4	3	4	3	4
P3	4	4	5	3	3	3	3	4
P4	4	4	4	5	4	4	5	4
P5	3	4	4	5	5	5	4	3
P6	3	4	3	4	5	5	4	3
P7	3	3	3	4	3	4	5	4
P8	5	3	4	3	4	4	3	5