AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Toxicology								
Course Code	KZM104		Couse Level	Short Cycle (Associate's Degree)					
ECTS Credit	3	Workload	70 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	To give the necessary information for poison, poisoning, toxic dose and mechanism of action of the major poisons and hygiene in working environment.								
Course Content	The entry, distribution, biotransformation and excretion of poisonous substances into the body, the mode of action of poisons, lead, mercury, arsenic, antimony, cadmium, barium, etc. Metal and its salts, carbon monoxide, hydrogyanide, sulfuric hydrogen, phosgene etc. Gases, hydrocarbons, aliphatic halogenated hydrocarbons, aromatic hydrocarbons, aliphatic aromatic amines, alcohols, esters, amines and organic sulfur compounds, their toxicity, mode of action, and hygienic conditions.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Individual Study								
Name of Lecturer(s)									

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

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; General concepts in toxicology; Place of toxicology in environmental engineering
2	Theoretical	Classification of toxic substances according to their chemical structures
3	Theoretical	Entry ways of toxic substances to living organism; Toxic mechanisms of action
4	Theoretical	Evaluation of the toxic effect
5	Theoretical	Mutagenic and teratogenic substances and agents. Chemical carcinogens
6	Theoretical	Behavior of chemicals in the abiotic environment and pollutants
7	Theoretical	Effects of metallic pollutants
8	Intermediate Exam	Quiz
9	Theoretical	Effects of gas and dust pollutants in the air
10	Theoretical	Toxic Effects of Organic Solvents
11	Theoretical	Pesticides and Soil Pollutants
12	Theoretical	Biotic and abiotic Environment of Pesticides
13	Theoretical	Radiation and Toxicology of Radioactive Isotopes
14	Theoretical	Important Toxic Substances Used in Industry
15	Theoretical	An overview
16	Final Exam	Exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	3	42
Midterm Examination	1	10	1	11
Final Examination	1	16	1	17
			Total Workload (Hours)	70
			[Total Workload (Hours) / 25*] = **ECTS**	3
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	Interpret poison and poisoning, active substance and sources causing poisoning, diagnosis and treatment approaches in working life
2	To be able to explain the way of entry of toxic substances to living organism
3	Recognizes toxic effects mechanisms
4	Recognize the effects of metallic pollutants
5	Recognizes the effects of gaseous pollutants in the air
6	Recognizes the effects of dust pollutants in the air
7	Recognizes the toxic effects of organic solvents
8	Interprets important toxic substances used in industry

Programme Outcomes *(Cosmetic Technology)*	
1	To define and classfify cosmetics.
2	To learn the classification of cosmetic raw materials, purposes, products to use and what properties should be carried.
3	To describe and classify toxicity, to learn toxic substances and analyze methods.
4	To learn laboratory safety, to apply safety precautions when working with dangerous chemicals.
5	To learn and apply necessary tests for cosmetic raw materials, intermediates and finished products.
6	To perform a scientific study, analyze study and report results of study scientifically.
7	To interpret experimental results, to evaluate data in point of cosmetic science.
8	To act in accordance with the principles of ethics, to have awareness of professional and ethical responsibility.
9	To be individuals who are committed to Atatürk's Principles and Revolutions, contemporary, democratic, secular, protecting and developing their country, protecting their nation, respecting human rights, protecting nature, non-discriminatory, adhering to their traditions and customs, and protecting their values.
10	To be an individual who has completed his personal development, can adapt to society and contribute positively

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
P3	5	5	5	5	5	5	5	5