Course Name	Code	Semester	Theoretical (hours/week)	Practice (hours/week)	Laboratory (hours/week)	ECTS
CLINICAL TOXICOLOGY	**BBM 527**	1th/2nd Semester	3	0	0	5
Prerequisites	None					
Course Language	Turkish					
Course Type	Elective					
Teaching Methods	Lecture, Discussion, Question-Answer					
Instructor(s)						
Course Objective	To provide students with the general concepts about toxicology, ways of entry of poisons into the body and toxicological effects of substances.					
Course Learning Outcomes	At the end of the course the student will be able to; 1- Describe the basic concepts in toxicology: 1.1. Define the term toxicology and basic concepts of toxicology 1.2. Define the sub-branches of toxicology. 1.3. List the toxic effects of substances 2- Explain the toxicities that may occur in workplaces: 2.1. Define industrial toxicology 2.2. Explain toxic exposure in the workplace 2.3. Explain the concepts related to toxic substance exposure levels in workplaces. 3- Explain the effects of toxic substances on various organs and systems. 3.1. List acute and chronic toxicity conditions that may occur in human by different ways. 3.2. Summarize the ways of entry of toxic substances into the body. 3.3. Explain toxic substances frequently exposed in workplaces					
Resources	1- Toxicology, Nevin Valdez. 2. Poisoning, Selim Kurtoğlu. 3. Goldfrank's Toxicologic Emergencies, 11e, Robert S. Hoffman, Mary Ann Howland, Neal A. Lewin, Lewis S. Nelson, Lewis R. Goldfrank, McGraw-Hill Education, OH, United States 2018 4. Barile, A.F. ' Clinical Toxicology, Principles and Mechanisms ', CRC Press, London, 2004. 5. Olson K.R., Lange Poisoning & Drug Overdose, Lange Medical Books/McGraw-Hill, 2007					

WEEKLY COURSE TOPICS

Weeks	DISCUSSION TOPICS TO BE PROCESSED
1.	Introduction To Toxicology (Definition, History, Classification).
2.	Classification Of Toxic Substances
3.	Mutagenic Effects, Carcinogenic Effects, Teratogenic Effects, Allergic Effects.
4.	Introduction To The Body Of Chemicals.
5.	Pharmacokinetics Of Chemicals
6.	Chemicals Frequently Exposed İn Workplaces (Toxic Gases, Household Chemicals)
7.	Chemicals Frequently Exposed In Workplaces (Insecticides, Herbicide, Aliphatic And Aromatic Hydrocarbons)
8.	**Midterm Exam**
9.	Hazardous Substances In Special Reserves
10.	War Poisons
11.	Heavy Metal Toxicity
12.	Approach To Poisoning
13.	Article Discussion
14.	Article Discussion
15.	**Final Exam**

ECTS/ WORKLOAD TABLE

Activities	**Number**	**Duration**	**Total Work load**
Course	14	3	42
Laboratory			
Practice			
Field Study			
Outclass course work hours (Self working / Teamwork / Preliminary work)	16	3	48
Presentations (Video preparation / Poster preparation / Oral presentation / Focus group discussion / Applying questionnaire/ Observation and report writing)			
Seminars	1	8	8
Project			
Case Study			
Role playing, dramatization			
Preparing and criticizing article			
Semester midterm exams	2	10	20
Semester final exams	1	7	7
The total Workload (hours)/25 (S)	125/25 = 5		
ECTS	**5**		

EVALUATION SYSTEM

Semester Work	The number of	Contribution
Midterm Exam	1	25%
Quiz		
Laboratory		
Practice		
Field Study		
Specific practical training (If exists)		
Homework Assignments		
Presentations and Seminars	1	25%
Projects		
Other evaluation methods		
Total of Midterm Studies		50%
Final Studies		
Final	1	50%
Homework assignment		
Practice		
Laboratory		
Total of Final Studies		50%
Contribution of midterm studies to course grade		50%
Contribution of final studies to course grade		50%
Total Grade		100

COURSE LEARNING OUTCOMES THE PROGRAM WITH THE ASSOCIATION QUALIFICATIONS

Program Qualifications		**Course Learning Outcomes**		
		LO1	**LO2**	**LO3**
1.	Degree level qualification in the field of Biological and Biomedical Sciences based on the expertise level up-to-date information, enhances and deepens.	**4**	**4**	**4**
2.	Biological and Biomedical Sciences field requires a level of information technology, technical equipment and machinery and tools that are specific to the field information	**4**	**4**	**4**
3.	In the field of biological and Biomedical Sciences extrapolates integrate with information from different disciplines to create new information, comments, analysis and synthesis by using different research methods and propose solutions.	**4**	**4**	**4**
4.	The report of his research the author.	**4**	**4**	**4**
5.	Empirical research plans.	**4**	**4**	**4**
6.	Biological and Biomedical Sciences brings solutions within the field, solves the problems, assesses the results obtained when necessary.	**4**	**4**	**4**
7.	Biological and Biomedical Sciences Field and public health-related priority issues scientific clinical and/or descriptive research/presentations/publication.			
8.	Biological and Biomedical Sciences related field evaluates information critically.	**4**	**4**	**4**
9.	Biological and Biomedical Sciences in the field of professional development and lifelong learning policy applies in the work performed.	**4**	**4**	**4**
10.	Biological and Biomedical Sciences, and current developments in the field of information, and their work in the same field or with groups other than the written, oral and Visual systematically as he discusses and shares.	**4**	**4**	**4**
11.	The professional environment, social relationships, and those relationships are a critical perspective, norms and makes the need to improve them.	**4**	**4**	**4**

12.	Biological and Biomedical Sciences in the field of data collection, interpretation, announcing towards restriction, social, scientific and ethical values in oversees and teaches these values.	**4**	**4**	**4**
13.	Biological and Biomedical Sciences is the basic unit of society, current developments in the field of children's and family to include national values and evaluates in line with the realities of the country.	**4**	**4**	**4**
14.	Ethical principles and rules are important to the individual and society, ethics.	**4**	**4**	**4**
15.	Biological and Biomedical Sciences in the field with strategy, policy and implementation plans and results obtained within the framework of the quality processes.	**4**	**4**	**4**

Qualification Level: 1 Provide: Low, 2: low/medium, 3: medium, 4: High, 5: Excellent