Course Title	Code	Semester	Theoretical (hours/week)	Practice (hours/week)	Laboratory (hours/week)	ECTS
Food Toxicology	BDB240	4th Semester / Spring Term	2	0	0	4
Prerequisites	None					
Language of Instruction	Turkish					
Course Type	Elective					
learning and teaching techniques of the Course	Expression Method, Question - Answer Method, Brainstorming Method					
Instructor(s)						
Goal	Learning of toxic substances naturally occurring in foods or formed and transmitted during production, preparation and storage, understanding the potential effects of these substances on detoxification mechanisms and health and understanding the legal regulations on food toxicology.					
Learning Outcomes	1. Gain basic knowledge about food toxicology 2. Knows the toxicological properties of poisonous substances naturally found and transmitted in foods. 3. Understands food pollutants and their effects on health 4. Learn legislation related to food safety and toxicology in the World and Turkey					
References	1. Kodeks Alimentaryus Commission, www.codexalimentarius.net 2. Ministry of Food and Agriculture and Livestock, Turkish Food Codex http://www.gkgm.gov.tr/mevzuat/kodeks/kodeks_liste.html 3. Lu FC., Kacew S. (2009) Lu's Basic Toxicology, Fundamentals, Target Organs and Risk Assessment, (Edited by), Fifth Edition, CRC press. 4. Altuğ T. Introduction to Toxicology and Food, CRC Press, Boca raton, 2003. 5. Tayfur M. Food hygiene, foodborne infections and poisonings, Kuban printing house, Ankara, 2009. 6. Deshpande S.S. (2002). Handbook of Food Toxicology, CRC press. 7. Centers for Disease Control and Prevention (CDC), http://www.cdc.gov 8. European Food Safety Authority (EFSA), http://www.efsa.europa.eu 9. World Health Organization (WHO), http://www.who.int					

Course Outline Weekly:

WEEKS	TOPICS
1. Week	Principles of food toxicology
2. Week	Food safety and principles
3. Week	Effective pathways of toxins
4. Week	Biotransformation mechanisms
5. Week	Natural toxic compounds found in foods
6. Week	Microbial toxins in foods
7. Week	Environmental pollutants in foods
8. Week	**MIDTERM EXAM**
9. Week	Toxic contaminants from industrial waste
10. Week	Pesticide residues and radionuclides in foods
11. Week	Contaminants carried from foodstuffs to food
12. Week	Pollutants formed during the cooking process in foods
13. Week	Ways to prevent food toxicity
14. Week	Health effects of pollutants in foods
15. Week	Legal regulations about food pollution

ECTS (Student Work Load Table)

Activities	Number	Duration	Total Work Load
Course Duration	14	2	28
Laboratory			
Practice			
Field Study			
Study Time Out of Class (Free study / Group Work / Preliminary Work)	14	4	56
Presentation (Making videos / Preparing a poster / Oral presentation / Focus Group Meeting / Survey Application / Observation and Report Writing)			
Seminars			
Project			
Case study			
Role playing, Dramatization			
Writing articles, Critique			
Mid-term Exam	1	6	6
Final Exam	1	10	10
Total Work Load (hour) / 25(s)	**100/25=4**		
ECTS	**4**		

Evaluation System

Mid-Term Studies	**Number**	**Contribution**
Midterm exams	1	100%
Quiz		
Laboratory		
Practice		
Field Study		
Course Internship (If There Is)		
Homework's		
Presentation and Seminar		
Project		
Other evaluation methods		
Total Time To Activities For Midterm		100
Final works		
Final	1	100%
Homework		
Practice		
Laboratory		
Total Time To Activities For Midterm		100
Contribution Of Midterm Studies On Grades		40%
Contribution Of Final Exam On Grades		60%
Total		100

The relationship between learning outcomes and the program qualifications of the courses

Program Qualifications	**L.O.1**	**L.O. 2**	**L.O.3**	**L.O.4**
1. Enables the students to use theoretical knowledge based on basic and social sciences in practice.	5	5	5	5
2. Has the ability to use equipments and information Technologies required for the professional practice efficiently.	-	-	-	-
3. Knows his rights, duties and responsibilities towards the society, colleagues, and other professions, individuals and patients, and learns how to behave in harmony with the professional ethical rules.	-	-	-	-
4. When confronted with problems within any field of Nutrition and Dietetics, has the ability to observe, diagnose, assess, report and come up with solutions thanks to their up-to-date knowledge and skills.	5	-	3	-
5. Gains efficient working skills based on the principles of effective communication, responsibility, solution-oriented working in diciplinary and interdisciplinary conditions.	4	5	5	5
6. Has the ability to make a plan for a research individually or as part of a team, make experiments, collectand analyze the data, interpret and write a report by using theoretical / practical knowledge and skills gained in the field of Nutrition and Dietetics.	-	-	-	-
7. Develops suggestions for healty/sick individuals and those at risk considering their lifelong diet.	-	-	-	-
8. Gains knowledge to contribute to the diet plans and politics to be developed based on the needs of the individuals and the society.	-	-	-	-
9. Improves themselves by following the latest advances in their profession nationally and internationally, and acquires awareness in lifelong learning.	4	5	5	5

Contribution to the level of proficiency: 1. Lowest**, 2.** Low / Medium**, 3.** Average**, 4.** High**, 5.** Excellent