BASIC CHEMISTRY II

BASIC CHEMISTRY II	Code	Term	Theory (hours/week)	Application (hours/week)	Laboratory (hours/week)	ECTS
	BDB106	2.Semest / Bahar	2	0	2	4
Prerequisites	None					
Language of Instruction	Turkish					
Course Type	Compulsory					
Learning and Teaching Techniques of The Course	Expression Question & Answer, Display Practice - Practice					
Instructor(s)	Asst. Prof.. Dr. Remziye Aysun KEPEKÇİ					
Goal	It is to develop the ability to comprehend the basic knowledge of the problem, problem solving and correct thinking.					
Learning Outcomes	1. 1. Reversible reactions, heterogeneous equilibrium, equilibrium constants, Le Chatelier rule 2. Acid-base definitions (Arrhenius, Bronsted-Lowry and Lewis definitions), acids and bases to learn strength, neutralization 3. Being able to have knowledge about system and its variables, zero, first, second and third laws of thermodynamics, reaction energy, enthalpy, entropy, free energy, Hess law 4. Explain structures of organic compounds according to molecule orbital theory 5. Classification of organic compounds according to their basic functional group 6. Can name organic compounds according to internationally accepted rules 7. Describe the isomeric species in organic chemistry. To be able to explain the physical and chemical properties of organic compounds 8. Describe properties that an organic compound must possess in order to be aromatic 9. Recognize the ways of obtaining organic compounds 10. Be able to have knowledge about how experiment and theory are related by doing simple experiments					
References	1. . R. H. Petrucci, W.S. Harwood, F.G. Herring, General Chemistry: Principles and Modern Applications 1 Translation Editors: T. Uyar, S. Aksoy, Eighth Edition					

Course Outline Weekly:

WEEKS	TOPİCS
1. Week	Chemical kinetics Preliminary information about laboratory presentation and experimental studies
2. Week	Principles of chemical equilibrium Effect of concentration on reaction rate
3. Week	Principles of chemical equilibrium Effect of temperature on reaction rate
4. Week	Acids and bases Chemical equilibrium

5. Week	Acids and bases Preparation of buffer solutions
6. Week	Acid-base and solubility balances Soap making
7. Week	Acid-base and solubility balances
8. Week	**MIDTERM EXAM**
9. Week	Introduction to organic chemistry: Saturated hydrocarbons Organic functional group analysis
10. Week	Organic reactions and functional groups Organic functional group analysis
11. Week	Alcohols, perspiration Oxidation of alcohols
12. Week	Aldehydes and ketones Cream construction
13. Week	Carboxylic acids, esters Amines and amides Aspirin made
14. Week	FINAL

Student Work Load Table

Activities	**Number**	**Duration**	**Total Work Load**
Course Duration	14	2	28
Laboratory	14	2	28
Practice			
Field Study			
Study Time Of Outside Of Class (Pre-Study, Practice, Etc.)	14	2	28
Presentations (Video shoot/Poster preparation/Oral presentation, Etc.)			
Seminars			
Project			
Case study			
Role playing, Dramatization			
Writing articles, Critique			
Time To Prepare For Midterm Exam	1	6	6
Final Exam Preparation Time	1	10	10
Total Work Load (hour) / 25(s)	100 / 25=4		
ECTS	**4**		

Evaluation System

Mid-Term Studies	**Number**	**Contribution**
Midterm exams	1	%25
Quiz		
Laboratory	1	%25
Practice		
Field Study		
Course Internship (If There Is)		
Homework's		
Presentation and Seminar		
Project		
Other evaluation methods		
Total Time To Activities For Midterm		50
Final works		
Final	1	%100
Homework		
Practice		
Laboratory		
Total Time To Activities For Midterm		50
Contribution Of Midterm Studies On Grades		%50
Contribution Of Final Exam On Grades		%50
Total		100

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

Program Qualifications	**Learning outcomes**									
	L.O.1	**L.O. 2**	**L.O.3**	**L.O.4**	**L.O.5**	**L.O.6**	**L.O.7**	**L.O.8**	**L.O.9**	**L.O.10**
1. To acquire information in the basic and social sciences as the Dietitian as he profession entails and make use of it for life.	3	3	3	3	3	3	3	3	3	3
2. To develop personalized diet and programme in accordance with the principles of adequate and balanced nutrition.										
3. To improve and develop the food and nutrition plans and policy for the development of individuals with the energy and nutrient element requirements with scientific method detection, health protection										
4. To determine and evaluate individual, the community and										

	the patient's nutritional status by applying up-to-date information gained in the field of nutrition and dietetics. She/he can use the knowledge to raise the level of community health and the quality of life.									
5.	Assess the nutritional status of the patients, evaluate the clinical symptoms, plan and apply individualized medical nutrition therapy for the patients.									
6.	The student can understand the basic values and culture of the society he/she is living in and gain the skill to transform him/herself in a positive way									
7.	Dietitian can improve products, make laboratory practice on elements affecting analysis and quality of nutrition, review and evaluate them regarding the legal regulations	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**
8.	The student embraces the concepts with regard to biological systems that form the basis of human health, Anatomy, Physiology, and the sustainability of them.									
9.	The student can participate in Nutrition and Dietetics practices individually and/or within a team, use, apply, discuss and share scientific and evidence based knowledge in nutrition and dietetics practice with team and team members, develop and demonstrate effective skills using oral, print, visual methods in communicating and expressing thoughts and ideas, communicate with all stakeholders within ethical principles. Develop and demonstrate effective communications skills using									

oral, print, visual, electronic and mass media methods										
10. Dietitian has knowledge to develop food and nutrition plans and policies for protection of health, in order to improvement and development by using methods for determining the nutritional status.										

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