NUTRITIONAL BIOCHEMISTRY II

Course Name	Code	Term	Theory (hours/week)	Application (hours/week)	Laboratory (hours/week)	ECTS
NUTRITIONAL BIOCHEMISTRY II	BDB202	4. Semester/ Spring	3	0	0	4
Prerequisites	None					
Language of Instruction	Turkish					
Course Type	Compulsory					
Learning and Teaching Techniques of The Course	Lecture Question & Answer Discussion					
Instructor(s)	Prof. Dr. Efsun KARABUDAK					
Goal	The aim of this course is to explain the basic topics related to the structure and functions of micronutrients, water, enzymes and hormones.					
Learning Outcomes	1. Be able to learn the metabolism of vitamins and minerals, their usage and functions by cells 2. Understanding the importance of water and electrolytes in terms of continuity of life 3. Basic information about enzymes and hormones can be obtained theoretically 4. Understanding the bioavailability and functional properties of nutrients in organism and their interactions with each other and the results of these interactions. Gives information about micro nutrition-related disorders and their metabolism.					
References	1. Aksoy, M. Beslenme Biyokimyası, Hatiboğlu Yayın Evi, 2010. Ankara. 2. Gözükara EM. Biyokimya, Nobel Kitapevi 5. Baskı, 2010, Ankara. 3. Pamela C.Champe, Richard A. Harvey , Denise R. Ferrier.Lippincott Biochemistry Ulukaya E. (çeviri editörü).3.Baskı. 4. Champe P.C. Lippincott's illustrated reviews:Biochemistry / Pamela C. Champe, Richard A. Harvey; technical consultant F. Vella;computer graphics: Michael Cooper. 6th edition. Philadelphia: J.B. Lippincott Company, 2014., 5. Harper H.A. Harper's biochemistry. 21st edition.California : Appleton & Lange, 2006.					

Course Outline Weekly:

WEEKS	TOPİCS
1. Week	Definition, structure and classification of enzymes
2. Week	Functions of enzymes, utilization of diagnosis and treatment
3. Week	Hormones
4. Week	Hormones
5. Week	Vitamins, oil soluble
6. Week	Vitamins, water soluble
7. Week	Vitamins, water soluble
8. Week	**MIDTERM EXAM I**
9. Week	Vitamins, water soluble
10. Week	Free radicals-antioxidants
11. Week	Water and electrolytes, balance of body fluid
12. Week	Minerals
13. Week	**MIDTERM EXAM II**
14. Week	Minerals
15. Week	Minerals

Student Work Load Table

Activities	Number	Duration	Total Work Load
Course Duration	13	3	39
Laboratory			
Practice			
Field Study			
Study Time Of Outside Of Class (Pre-Study, Practice, Etc.)	13	2	26
Presentations (Video shoot/Poster preparation/Oral presentation, Etc.)			
Seminars			
Project			
Case study			
Role playing, Dramatization			
Writing articles, Critique			
Time To Prepare For Midterm Exam	2	10	20
Final Exam Preparation Time	1	8	16
Total Work Load (hour) / 25(s)	101/ 25=4,04		
ECTS	**4**		

Evaluation System

Mid-Term Studies	Number	Contribution
Midterm exams	2	%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		%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
1. To acquire information in the basic and social sciences as the Dietitian as he profession entails and make use of it for life.	2	2	2	2
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.	2	2	2	2
5. Assess the nutritional status of the patients, evaluate the clinical symptoms, plan and apply individualized medical nutrition therapy for the patients.	3	3	3	3
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				
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.	4	4	4	4
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