BDB202 - 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, brainstorming, individual study
Instructor(s)	
Goal	The aim of this course is to teach theoretically the basic issues related to the structures and functions of micronutrients in the relationship between nutrition and metabolism.
Learning Outcomes	1. Learn the hunger and satiety mechanisms and the functions of nutrients in these mechanisms, 2. Understand the metabolism of vitamins and minerals, their usage and functions by cells, 3. Understand the importance of water and electrolytes for the continuation of life, 4. Learn about the bioavailability and functional properties of nutrients in the organism and their interactions with each other and the results of these interactions, 5. Learns the effect of micronutrients on metabolic disorders,
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	TOPICS
1. Week	Definition, structure and classification of enzymes
2. Week	Vitamins, oil soluble (vitamins A and K)
3. Week	Vitamins, oil soluble (vitamins D and E)
4. Week	Vitamins, water soluble (niacin, riboflavin, thiamine)
5. Week	Vitamins, water soluble (folate, vitamin B12)
6. Week	Vitamins, water soluble (Vitamin B6, biotin, choline)
7. Week	Vitamins, water soluble (pantothenic acid, vitamin C)
8. Week	**MIDTERM EXAM I**
9. Week	Water and electrolytes, balance of body fluid
10. Week	Minerals (calcium, phosphorus)
11. Week	Minerals (magnesium, iron)
12. Week	Minerals (zinc, copper, manganese)
13. Week	Minerals (fluoride, iodine, selenium, sulfur)
14. Week	General discussion
15. Week	**MIDTERM EXAM II**

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	70%
Quiz		
Laboratory		
Practice		
Field Study		
Course Internship (If There Is)		
Homework's	2	%30
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	**Learning outcomes**				
	L.O.1	**L.O. 2**	**L.O.3**	**L.O.4**	**L.O.5**
1. Enables the students to use theoretical knowledge based on basic and social sciences in practice.	5	5	5	4	5
2. Has the ability to use equipment and information Technologies required for the professional practice efficiently.	1	2	3	2	2
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	2	3	2	4
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	5	5	4	3
5. Gains efficient working skills based on the principles of effective communication, responsibility, solution-oriented working in disciplinary and interdisciplinary conditions.	4	4	4	3	4
6. Has the ability to make a plan for a research individually or as part of a team, make experiments, collect and analyze the data, interpret and write a report by using theoretical / practical knowledge and skills gained in the field of Nutrition and Dietetics.	5	5	5	5	5
7. Develops suggestions for health/sick individuals and those at risk considering their lifelong diet.	5	5	5	5	5
8. Gains knowledge to contribute to the diet plans and politics to be developed based on the needs of the individuals and the society.	5	5	5	5	5
9. Improves themselves by following the latest advances in their profession nationally and internationally, and acquires awareness in lifelong learning.	5	5	5	5	5

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