BDB238- Nutrition and Genomics

Course Name	Code	Term	Theory (hours/week)	Application (hours/week)	Laboratory (hours/week)	ECTS
NUTRİTİON AND GENOMİCS	BDB238	4. Semester/ Spring	2	0	0	4

Prerequisites	None
Language of Instruction	Turkish
Course Type	Elective
Learning and Teaching Techniques of The Course	Expression
Instructor(s)	
Goal	The aim of this course is to comprehend the relationship between nutrition and genomics.
Learning Outcomes	1. Comprehends the basic principles of genetics, nutrition and genetic interaction, 2. Explains nutrigenomic terms, 3. Explains the interaction between cancer and nutrigenomic concepts 4. Comprehends gene diet interaction.
References	1. Cooper M.G., Hausman R. E., 7. Baskı 2016 2. Dündar M., Tıbbi Genetik ve Klinik Uygulamaları, Pelikan kitabevi 2017 3. Mahan L.K., Raymond J.L., Krause Besin ve Beslenme Bakım Süreci, Nobel kitabevi, 2019

Course Outline Weekly

WEEKS	TOPICS
1. Week	Basic Principles and Terms of Genetics
2. Week	Nutrition and genomic related concepts
3. Week	Aging and cell death
4. Week	Intercellular communication
5. Week	Genetic metabolic diseases
6. Week	Genetic metabolic diseases
7. Week	Epigenetic Mechanisms
8. Week	**Midterm**
9. Week	Methylation and Nutrigenetics
10. Week	Diabetes and Nutrigenetics
11. Week	Carrier proteins and absorption disorders
12. Week	Carrier proteins and absorption disorders
13. Week	Cancer and Nutrigenomics
14. Week	An overview
15. Week	Discussion

Student Work Load Table

Activities	Number	Duration	Total Work Load
Course Duration	14	2	28
Laboratory			
Practice			
Field Study			
Study Time Of Outside Of Class (Pre-Study, Practice, Etc.)	14	4	56
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	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	**Learning outcomes**			
	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.	3	3	3	3
2. Has the ability to use equipments and information Technologies required for the professional practice efficiently.		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	4	4	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.	3	3	3	3
5. Gains efficient working skills based on the principles of effective communication, responsibility, solution-oriented working in diciplinary and interdisciplinary conditions.	4	4	4	4
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.		4		
7. Develops suggestions for healty/sick individuals and those at risk considering their lifelong diet.				4
8. Gains knowledge to contribute to the diet plans and politics to be developed based on the needs of the individuals and the society.				4
9. Improves themselves by following the latest advances in their profession nationally and internationally, and acquires awareness in lifelong learning.				4

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