



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Functional Foods and Health							
Course Code		BDB218		Course Level		First Cycle (Bachelor's Degree)			
ECTS Credit	2	Workload	48 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		To give the basic knowledge about functional foods which is as a current trend in the food and nutrition field, and to interpret the potential health effects of functional foods on health.							
Course Content		Definition of functional foods and bioactive compounds, classification of bioactive compounds, possible effects of functional foods on health, functional food market							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Individual Study, Problem Solving					
Name of Lecturer(s)		Lec. Duygu KAYA BİLECENOĞLU							

### Prerequisites & Co-requisites

ECTS Requisite	30
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### Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

### Recommended or Required Reading

1	Handbook of Nutraceuticals and Functional Foods. Wildman REC(ed), CRC Press, 2001
2	Functional Foods Concept to Product. Gibson GR and Williams CM (ed), CRC Press, 2000.
3	Fonksiyonel Besinler Gökhan Baysoy Akademi Yayınevi 2007
4	Fonksiyonel Beslenme Prof. Dr. Zeynep Banu Güzel Seydim SİDAS Yayınevi 2016

Week	Weekly Detailed Course Contents	
1	Theoretical	Definition of functional food Factors driving the growth of the functional foods Classification of functional foods in order to bioactive compounds
2	Theoretical	Probiotics and Health
3	Theoretical	Prebiotics and Health
4	Theoretical	Plant sterols-stanols and Health
5	Theoretical	Polyphenols I (Phenolic acids) and Health
6	Theoretical	Polyphenols II (Flavonoids: catechin, anthocyanins) and Health
7	Theoretical	Phytoestrogens and Health
8	Intermediate Exam	Midterm Exam
9	Theoretical	Sulphur compounds and Health
10	Theoretical	Carotenoids and Health
11	Theoretical	Fatty acids (omega-3, MUFA, PUFA, CLA) and Health
12	Theoretical	Functional Foods: Market Research
13	Theoretical	Regulations of Functional Foods : National & International



14	Theoretical	Functional Foods: Responsibilities of nutrition and dietetics professionals
15	Final Exam	Final Exam

**Workload Calculation**

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	13	0	2	26
Midterm Examination	1	10	1	11
Final Examination	1	10	1	11
Total Workload (Hours)				48
[Total Workload (Hours) / 25*] = ECTS				2

\*25 hour workload is accepted as 1 ECTS

**Learning Outcomes**

1	Define the functional foods and bioactive food components
2	Classify functional foods according to the bioactive compounds
3	Knows Potential health effects/benefits of functional foods and their components
4	Develop proper suggestions on functional foods as a part of diet
5	Have an idea about national and international regulations of functional foods
6	Have awareness about national and international market of functional

**Programme Outcomes (Nutrition and Dietetics)**

1	Assess, apply and evaluate the accuracy, reliability and validity of basic knowledge and evidence based current scientific developments on nutrition and dietetics.
2	Assess scientifically the energy and nutrients need of individuals and develop nutrition plans and programs for the clients according to the principles of adequate and balanced nutrition and assessment of energy and nutrient requirements
3	Develop food and nutrition plans and policies for the prevention and promotion of healthy lifestyle applying the methods of nutritional assessment for the population.
4	Assess the nutritional status of the patients, evaluate the clinical symptoms, plan and apply individualized medical nutrition therapy for the patients.
5	Evaluate the factors affecting the quality of food consumed by the individuals and populations from production to consumption and implement the legal standards and legislations on food safety and food security.
6	Consider, interpret and apply the basic scientific knowledge on nutrition and dietetics especially have skills on critical thinking, problem solving and decision making and use effectively the appropriate current technologies and computer, demonstrate skills in preparing research manuscripts, project proposals, collecting and verifying data and writing report.
7	Assess, evaluate and interpret the nutritional status of the individuals and population groups using current knowledge, develop preventive measures, apply medical nutrition therapy, demonstrate active participation, teamwork and contributions with national and international stakeholders in health and social areas, in terms of ethical principles.
8	Plan menus in the institutional food service systems depending on the energy and nutrient requirements of target groups in the scope of nutrition and dietetic principles, take care of food safety in all settings from purchase of food to service, apply appropriate service using technological developments.
9	Develop and use effective strategies for the education, counseling and encouragement of individuals and population groups to facilitate behavior change and choose healthy and safety foods, prepare and update the related educational materials.
10	Apply laboratory work on product development, food analysis and related factors effecting food quality and interpret the results and evaluate them according to the legal arrangements.
11	Plan, manage, evaluate, monitor and report researches and programs to educate and increase and improve the knowledge and awareness of individuals and population groups on healthy nutrition during all lifecycle period, and lead such activities, support and take role in the preparation and implementation of national and international food and nutrition plans and policies.
12	Work and perform duties in the scope of occupational responsibilities and ethical principles, understand the importance of lifelong learning, follow the latest developments (innovations) in science, technology and health, demonstrate professional attributes for the enhancement of nutrition and dietetics profession.
13	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
14	Plan, apply, monitor and evaluate individualized medical nutrition therapy within interdisciplinary approaches, considering the sociocultural, economical status of patients in various age groups and also contribute to clinical researches.

**Contribution of Learning Outcomes to Programme Outcomes 1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High**

	L1	L2	L3	L4	L5	L6
P1	2	3	2	3	3	2



P2	3	3	2	2	3	2
P3	2	2	3	2	2	2
P4	1	2	2	2	1	3
P5	2	2	4	1	2	2
P6	1	3	2	2	2	2
P7	2	2	2	1	2	2
P8	3	2	3	2	3	1
P9	2	2	2	3	2	2
P10	1	3	1	2	1	2
P11	2	2	2	1	2	3
P12	3	3	3	2	3	2
P13	1	3	2	2	3	2
P14	2	2	2	1	2	2

