AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Food Additives								
Course Code	BDB215		Couse Level	First Cycle (Bachelor's Degree)					
ECTS Credit	2	Workload	48 *(Hours)*	Theory	2	Practice	0	Laboratory	0
Objectives of the Course	The objective of this course is to explain and evaluate, identification and general features of food additives,classification of food additives, usage in the food industry, toxicological evaluation of food additives and their impacts on health and legal arrangements in Turkey and the world.								
Course Content	The identification, general features and classification of food additives, usage areas, toxicological evaluations on food additives and their impacts on health, purposes and methods in the food industry, legal arrangements related to food additives in Turkey and the world.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Individual Study								
Name of Lecturer(s)	Assoc. Prof. Yeliz TEKGÜL BARUT								

Prerequisites & Co-requisities	
ECTS Requisite	30

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading	
1	Anon.Kodeks Alimentaryus Komisyonu, www.codexalimentarius.net
2	Anon.Gıda ve Tarım ve Hayvancılık Bakanlığı,Türk Gıda Kodeksi http://www.gkgm.gov.tr/mevzuat/kodeks/kodeks_liste.html
3	Saldamlı İ, Uygun Ü. Gıda Katkı Maddeleri.Saldamlı İ (ed) Gıda Kimyası,Hacettepe Üniversitesi Yayınları,1998.
4	Branen AL., Davidson PM., Salminen S., Thorngate III JH. (2001). Food Additives (Edited by), Second Edition, CRC press.
5	Lu FC.,Kacew S. (2009) Lu?s Basic Toxicology , Fundamentals, Target Organs and Risk Assessment, (Edited by), Fifth Edition,CRC press.
6	Omaye ST. (2004). Food and Nutritional Toxicology (Edited by), CRC press.
7	Vries J. (1996) .Food Safety and Toxicity, (Edited by), CRC press.

Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction to food additives:definition, usage areas, purposes and functions
2	Theoretical	Legal arrangements and toxicological evaluations of food additives
3	Theoretical	Classifications of food additives, Antioxidants
4	Theoretical	Acidity regulators-Emulsifiers
5	Theoretical	Article discussion (presentation)
6	Theoretical	Colorants
7	Theoretical	Food preservatives
8	Theoretical	Midterm Exam
9	Theoretical	Sweeteners, flavors and fragnances
10	Theoretical	Stabilizers, thickening agents, gelling agents and water-soluble gums
11	Theoretical	Starter cultures and others(chelating agents, anti-clumping agents, raising agents)
12	Theoretical	Impact of food additives on health (1)
13	Theoretical	Impact of food additives on health (2)
14	Theoretical	Article discussion (presentation)

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	Identification of food additives
2	Learn functions and usage purposes of food additives
3	Learn and evaluate usage of food additives,
4	Learn classification of food additives,
5	Comment toxicological evaluations about food additives
6	Evaluate the impact of food additives on health
7	Learn Legal arrangements in Turkey and the world.

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	L7
P1	2	2	3	2	3	2	1
P2	2	2	1	3	2	2	1
P3	3	2	2	1	1	2	1
P4	2	3	2	1	1	1	2

P5	1	1	1	1	2	1	2
P6	1	1	1	2	1	1	3
P7	2	2	1	1	2	2	2
P8	2	1	2	1	1	1	1
P9	2	2	3	1	1	1	1
P10	1	1	2	2	1	1	1
P11	2	2	1	2	2	2	2
P12	3	2	1	2	2	1	1
P13	2	3	2	1	3	2	2
P14	1	2	1	1	2	1	1