AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Water Hygiene-Control and Industry								
Course Code	VBH623		Couse Level		Third Cycle (Doctorate Degree)				
ECTS Credit	6	Workload	150 *(Hours)*	Theory	1	Practice	2	Laboratory	0
Objectives of the Course	To teach classification of waters, their functions in organism, pollution causes of waters, cleaning by chemical and physical methods of waters, microbiological analysis of waters and evaluation of results.								
Course Content	World water amount, physical, chemical and microbiologic characteristics of water and water examination methods are described. Furthermore, methods of measurement of color, turbidity, pH, smell etc., microbiologic, chemical, radiologic measurements and water regulations are described.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Experiment, Demonstration, Discussion, Individual Study								
Name of Lecturer(s)									

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

Recommended or Required Reading	
1	Erol, İ., 2007. Gıda Hijyeni ve Mikrobiyolojisi. ISBN 978-975-00131-0-9, Pozitif Matbaacılık Ltd. Şti., Ankara
2	Uğur, M., Nazlı, B., Bostan, K. 1999. Gıda Hijyeni. Teknik Yayınları, İstanbul.
3	Demirer, A. 1995. Su Hijyeni. Ankara Üniversitesi, Veteriner Fakültesi, Besin Hijyeni ve Teknolojisi, Teksir.
4	Hazard characterization for pathogens in food and water :guidelines. – Geneva : WorldHealthOrganization, 2003.
5	Benjamin, Mark M. 2002. Waterchemistry 1st ed. – Boston, MAU
6	Lenore S., Clesceri, WEF, Chair Arnold E. Greenberg, APHA Andrew D. Eaton, AWWA 1998. Standard methods for the examination of water and wastewater. Edited by. American Public Health Association, 20 th Edition,

Week	Weekly Detailed Course Contents	
1	Theoretical	Introduction - Definition and importance of water hygiene
	Practice	Introduction
2	Theoretical	Physical characteristics of waters
	Practice	Introduction to laboratory equipment and materials
3	Theoretical	Chemical characteristics of waters
	Practice	Preparation the equipment and materials for the physical examinations of the waters
4	Theoretical	Microbiological characteristics of water
	Practice	Physical examination of the waters
5	Theoretical	Classification of water
	Practice	Preparation for microbiological analyses
6	Theoretical	Functions in body of water
	Practice	Sampling methods for microbiological analyses
7	Theoretical	Organicandinorganicsubstanceswhichmay be present in water
	Practice	Water microbiological analysis by MPN method
8	Practice	Total aerobic mesophilic countsin water
	Intermediate Exam	Midterm
9	Theoretical	The causes of water pollution
	Practice	Searching for coliform bacteria in water
10	Theoretical	Autoepuration
	Practice	Preparation for chemical analyses
11	Theoretical	Disinfection of water
	Practice	pH, hardnessand total organic substances investigaiton

12	Theoretical	Public health problems resulting from water
	Practice	Amonia, nitrate and nitrite investigation
13	Theoretical	Waste water purification
	Practice	Preparation of water analysis report
14	Theoretical	Investigation of water-related legislation
	Practice	Evaluation of there sult sobtained
15	Theoretical	Discussion
	Practice	Discussion

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	1	14
Lecture - Practice	14	0	2	28
Assignment	4	0	10	40
Reading	14	0	2	28
Midterm Examination	1	13	1	14
Final Examination	1	25	1	26
			Total Workload (Hours)	150
			[Total Workload (Hours) / 25*] = **ECTS**	6

**25 hour workload is accepted as 1 ECTS*

Learning Outcomes

1	Learns classification of waters,
2	Learns water functions in organism
3	Learns theim portance of water for human health
4	Learns chemical and physical characteristics of waters
5	Learns methods of chemical and microbiological analysis of waters
6	Learns evaluation of laboratory analysis results

Programme Outcomes *(Food Hygiene and Technology (Veterinary Medicine) Doctorate)*

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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	5	5	5	5	4	3
P2	3	3	3	3	1	1
P3	1	1	1	1	1	1
P4	2	2	2	2	3	3
P5	3	3	3	3	1	1
P6	2	2	2	2		
P7	2	2	2	2		
P8	1	1	1	1		

P9	2	2	2	2	2	2
P10	5	5	5	5	3	3
P11					5	5
P12					5	5
P13					4	4