AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Consumer Analysis in Environmental Applications								
Course Code	CSAG516		Couse Level	Second Cycle (Master's Degree)					
ECTS Credit	8	Workload	200 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	To comprehend the chemical instrumental analysis methods, and to learn their usage in environmental application.								
Course Content	Identification of chemical analysis. To learn the methods of instrumental analysis. To have knowledge about spectrochemical, chromatographic, electrophoretic and electroanalytical methods. To give the examples about methods of instrumental analysis in environmental applications.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Case Study, Individual Study								
Name of Lecturer(s)									

Assessment Methods and Criteria		
Method	Quantity	Percentage (%)
Midterm Examination	1	20
Final Examination	1	35
Assignment	3	45

Recommended or Required Reading	
1	Environmental Applications of Instrumental Chemical Analysis. Ed. Mahmood Barbooti, Apple Academic Press, 2015.

Week	Weekly Detailed Course Contents	
1	Theoretical	Fundamentals and types of chemical analysis. Instrumental Chemical Analysis
2	Theoretical	Spectrochemical Methods
3	Theoretical	Chromatographic Methods
4	Theoretical	Fundamentals of Electrophoretic Analysis
5	Theoretical	Principles of Electroanalytical Methods
6	Theoretical	Preparation, preservation, storage and transportation of environmental samples
7	Theoretical	Principles and applications of ion chromatography in environmental analysis
8	Theoretical	Environmental applications of capillary zone electrophoresis
9	Theoretical	Principles and applications of flow-injection analysis
10	Intermediate Exam	Midterm exam
11	Theoretical	Environmental applications of spectrochemical analysis
12	Theoretical	Environmental applications of electroanalytical methods
13	Theoretical	Heavy metal determination in environmental samples
14	Theoretical	Determination of organic pollutants in environmental samples.
15	Theoretical	Presentation of student homework
16	Theoretical	Presentation of student homework
17	Final Exam	Final exam

Workload Calculation				
Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	0	3	42
Assignment	7	0	10	70
Midterm Examination	1	34	2	36

Final Examination	1	50	2	52
			Total Workload (Hours)	200
			[Total Workload (Hours) / 25*] = **ECTS**	8
**25 hour workload is accepted as 1 ECTS*				

Learning Outcomes	
1	To have knowledge about chemical analysis and instrumental analysis.
2	Having knowledge about methods of instrumental analysis.
3	Understanding of examples of methods of instrumental analysis in environmental applications.
4	To have information about basic concepts, terminology and complementary medicine in health field
5	To be able to have theoretical and practical knowledge about environmental health, historical development and economic dimension of environmental health

Programme Outcomes *(Environmental Health Interdisciplinary Master)*	
1	To be able to have theoretical and practical updated information in the field of environmental health.
2	To be able to solve problems related to environmental health with scientific methods and evaluate them with a critical approach,
3	To have the ability to produce, execute and finalize new projects for scientific research,
4	To be able to have theoretical and practical knowledge about environmental health, historical development and economic dimension of environmental health,
5	To be able to have theoretical and practical knowledge about the deterioration effects of environment,

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

	L1	L2	L3	L4	L5
P1	2	5	1	5	3
P2	3	4	2	4	2
P3	4	4	3	3	4
P4	4	4	5	2	4
P5	4	5	4	1	4