AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Environment and Nanotechnology								
Course Code	CSAG644		Couse Level	Third Cycle (Doctorate Degree)					
ECTS Credit	8	Workload	200 *(Hours)*	Theory	3	Practice	0	Laboratory	0
Objectives of the Course	To emphasize of nanotechnology concept and to have knowledge about importance of nanotechnology in environmental applications.								
Course Content	Definition and history of nanotechnology. To introduce and characterization of nanomaterials. of nanomaterials. Examples about use of nanotechnology in environmental applications. To investigate of toxic impacts of nanomaterials.								
Work Placement	N/A								
Planned Learning Activities and Teaching Methods	Explanation (Presentation), Discussion, Case Study, Individual Study								
Name of Lecturer(s)	Prof. Deniz AKTAŞ UYGUN								

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

Recommended or Required Reading	
1	Professor Dr. Deniz AKTAŞ UYGUN's unpublished lecture notes.

Week	Weekly Detailed Course Contents	
1	Theoretical	Definition and history of nanotechnology
2	Theoretical	Nanosized materials and properties
3	Theoretical	Characterization and applications areas of nanosized materials.
4	Theoretical	Nanosensors and environment
5	Theoretical	Nanomanufacture in industry and advantages
6	Theoretical	Nanotechonology and wastes
7	Theoretical	Nanotechnology and air pollution
8	Theoretical	Nanotechnology and fossil fuel consumption
9	Theoretical	Nanotechnology in solar energy
10	Intermediate Exam	Midterm exam
11	Theoretical	Nanotechnology in energy generation and storage
12	Theoretical	Nanotechnology in water treatment
13	Theoretical	Nanocatalysts and environment
14	Theoretical	Green nanoscience
15	Theoretical	Toxic impacts of nanomaterials
16	Theoretical	Presentation of student homeworks
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 learn of nanotechnology concept.
2	To introduce of nanomaterials and compass of areas of usage.
3	Learning of applications of nanotechnology in environment area.
4	To be able to comment on issues related to the field
5	To be able to think interdisciplinary on issues related to public administration

Programme Outcomes *(Environmental Health Interdisciplinary Doctorate)*	
1	Equipped with advanced knowledge and skills related to research methods, data analysis and interpretation of research results in the development and application of environmental health theories;
2	who can take part in professional arrangements; contributes to the development of health related institutions;
3	Knows, interprets and comments on national and international environmental health legislation,
4	Organizasyon Assuming an effective role in environmental health organization and management,
5	To Equipped with the knowledge and skills necessary for the effectiveness of environmental health practices in the future;

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	4	4	5	2	5
P2	4	3	5	3	4
P3	4	4	5	2	3
P4	4	3	5	4	2
P5	4	3	2	5	2