



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Science Technology Society Environment							
Course Code		FBÖ430		Course Level		First Cycle (Bachelor's Degree)			
ECTS Credit	4	Workload	100 ( <i>Hours</i> )	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		Understanding the impacts of science and technology developments on society and the environment, Developing a critical perspective on interaction between science and technology society environment							
Course Content		To develop the understanding of science for all and to train individuals as science and technology literate, to help them to understand the nature of science with FTTÇ approach, to give social decision making and problem solving ability, to provide students with scientific and conceptual thoughts, critical thinking and problem solving skills for world problems							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Project Based Study					
Name of Lecturer(s)									

### Assessment Methods and Criteria

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

### Recommended or Required Reading

1	1. Ayvaci, H.Ş., 2009; Teknoloji ve Tasarım, Pegem Yayıncılık: Ankara
2	2. Çepni, S., Ayvaci, H. Ş., Bacanak, A. (1999). Fen Teknoloji ve Toplum, Trabzon: Celepler Matbaacılık

Week	Weekly Detailed Course Contents	
1	Theoretical	Science literacy, technological literacy
2	Theoretical	Scientific knowledge, types of scientific knowledge, scientific processes, characteristics of science
3	Theoretical	The past, present and future of scientific knowledge
4	Theoretical	Why was the Science Technology Society Environment (FTTÇ) approach needed? Historical overview
5	Theoretical	Relations between science, technology, society and environment
6	Theoretical	The effects of the developments in genetics and biotechnology on technology, society and environment
7	Theoretical	Health effects of scientific and technological developments
8	Intermediate Exam	midterm
9	Theoretical	Effects of scientific and technological developments on ecosystems and climate
10	Theoretical	The effects of information technologies on society
11	Theoretical	Scientific and technological developments and policies of countries
12	Theoretical	How do Turkish society, cultures, science and technology politics influenced by Energy and by environmental problems?
13	Theoretical	biological warfare
14	Theoretical	Scientific and technological developments and ethical problems
15	Theoretical	Course Evaluation
16	Final Exam	final exam

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	2	42
Assignment	14	1	1	28
Individual Work	12	0	1	12
Midterm Examination	1	6	1	7



Final Examination	1	10	1	11
Total Workload (Hours)				100
[Total Workload (Hours) / 25*] = ECTS				4
*25 hour workload is accepted as 1 ECTS				

### Learning Outcomes

1	(1) Understanding the nature of science and technology (2) Relations between science and technology (3) Realize the social and environmental context of science and technology (4) recognizes that technology shows differences in history in the same direction, undergoes a change, and that newly developed technology products have traces from previous ones (5) Explain how natural resources, habitats and habitats can be protected using technological products and systems, and how waste from the use of various products and systems can be reduced (6) Know local, national and global environmental problems and discuss possible solutions and results (7) Understands that science and technology applications can have positive or negative effects on individual, society and environment (8) The negative effects of science and technology are likely to be counteracted by developments in science and technology; So that these effects can be mitigated or mitigated (9) Explain that a particular scientific or technological development may have positive or negative, foreseen or unforeseen effects on the individual, the collecting and the environment
2	(2) Relations between science and technology
3	(3) Realize the social and environmental context of science and technology
4	(4) recognizes that technology shows differences in history in the same direction, undergoes a change, and that newly developed technology products have traces from previous ones
5	(5) Explain how natural resources, habitats and habitats can be protected using technological products and systems, and how waste from the use of various products and systems can be reduced

### Programme Outcomes (Science Teacher Education)

1	To be able to gain subject knowledge of profession in theory and practice in the learning process.
2	To be able to gain the competence of using the appropriate approach, strategy, method and technique for the instructional plans to be prepared in the learning process.
3	To be able to gain the skills of the teaching profession in the learning process.
4	To be able to implement teaching profession knowledge, skills, attitudes and habits related to the subject-matter in a real teaching and learning environment in the learning process.
5	To be able to comprehend contemporary approaches of education and the philosophy they are based on.
6	To be able to gain the basic skills such as comprehending, expressing, commenting, evaluating, being aware and enterprising, communicating, acknowledging the individual related to the subject-matter.
7	To be able to become individuals faithful to the Principles and Revolutions of Ataturk, be modern democratic, secular, protecting and deveoping one's country, being alive to the nation, respecting human rights, preserving the nature, not being discriminatory, giving importance to the traditions and customs, protecting the values
8	To be able to improve oneself in terms of sport, art and culture.
9	To be able to become individuals believing in lifelong learning.
10	To be able to gain the vision of being individuals who keep up with developments in social, economic, technological and scientific areas, who investigate the main reasons of World problems and try to contribute to the solutions of these problems.

### 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	5	5	5		5
P2	5	5	5	5	5
P3	5	5	5	4	4
P4	5	5	5	5	5
P5	5	5	4	4	
P6	5	5	5	5	5
P7		5	5	5	5
P8	5	4	4	4	5
P9	5	5	5	5	4
P10	5	5	4	5	5

