SOURCE PROBLEMS ABOUT SCIENCE AND TECHNOLOGY

1	Course Title:	SOURCE PROBLEMS ABOUT SCIENCE AND TECHNOLOGY	
2	Course Code:	FEN0005	
3	Type of Course:	Optional	
4	Level of Course:	First Cycle	
5	Year of Study:	2	
6	Semester:	3	
7	ECTS Credits Allocated:	4.00	
8	Theoretical (hour/week):	2.00	
9	Practice (hour/week):	0.00	
10	Laboratory (hour/week):	0	
11	Prerequisites:		
12	Language:	Turkish	
13	Mode of Delivery:	Face to face	
14	Course Coordinator:	Dr. Ögr. Üyesi MEHMET DEMİRBAĞ	
15	Course Lecturers:		
16	Contact information of the Course Coordinator:		
17	Website:		
18	Objective of the Course:	The aim of this course is to teach prospective science teachers about the past and present effects and possible future scenarios of science and technology problems.	
19	Contribution of the Course to Professional Development:	This course will contribute to students' having advanced theoretical, methodological and factual knowledge in the field of "Teaching Profession General Competencies" in the field of "Professional Knowledge" in a way that includes the questioning point of view. In addition, this course contributes to the areas of communication and social competence from the Basic Field Education competencies by providing students to prepare professional projects and activities by showing their sensitivity to the events and developments in the agenda of the society and the world.	
20	Learning Outcomes:		
		1	Knows the Chronological History of Science and Technological Developments.
		2	Explains the Innovations in Science and Technology
		3	Understands the positive effects of Science and Technology on Human Health.
		4	Knows the risks of science and technology on Human Health.
		5	Explain greenhouse gas and global warming issues and discuss their possible effects.
		6	Predict disaster scenarios and future projections related to science and technology related problems.
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21	Course Content:		
	Course Content:		

Week	Theoretical	Practice
1	Chronological history of science and technology developments	
2	Chronological history of science and technology developments	
3	Innovations in science and technology (Agriculture)	
4	Innovations in science and technology (Artificial cells, Transgenic Livings)	
5	Innovations in science and technology (Electronic, Automation)	
6	Positive effects of innovations in science and technology to people' life	
7	Positive effects of innovations on human life	
8	Risks posed for human health	
9	Risks posed for human health	
10	Greenhouse Gases	
11	Global warming	
12	Disaster Scenarios and solutions	
13	Disaster Scenarios and solutions	
14	Future Projections	

22	Textbooks, References and/or Other Materials:	References

Activites	Number	Duration (hour)	Total Work Load (hour)
Theoretical	14	2.00	28.00
Practicals/Labs	0	0.00	0.00
Self study and preperation	12	3.00	36.00
Homeworks	2	14.00	28.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	15.00	15.00
Others	0	0.00	0.00
Final Exams	1	20.00	20.00
Total Work Load			142.00
Total work load/ 30 hr			4.23
ECTS Credit of the Course			4.00

TERM LEARNING ACTIVITIES	NUMBE	WEIGHT
Midterm Exam	1	30.00
Quiz	0	0.00
Home work-project	1	10.00
Final Exam	1	60.00
Total	3	100.00
Contribution of Term (Year) Learning Activities to		40.00

Contribution of Final Exam to Success Grade	60.00
Total	100.00

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Pegem Atıf İndeksi, 1-392.

Measurement and Evaluation Techniques Used in the Course	Approaches based on constructivist learning theory such as project-based learning, case study, and problem-based learning will be used in the teaching of the course. will discuss. During the term evaluation, the students will do a project-based homework for one of the science and technology related problems in small groups, and at the end of the term, they will do the term exam for possible future scenarios. Points obtained from midterm and final assessment exam and homework will be used in the assessment. Evaluation scores will be subjected to relative evaluation by entering the automation system.

24	**ECTS / WORK LOAD TABLE**

25	**CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS**															
	PQ1	**PQ2**	**PQ3**	**PQ4**	**PQ5**	**PQ6**	**PQ7**	**PQ8**	**PQ9**	**PQ10**	**PQ11**	**PQ12**	**PQ13**	**PQ14**	**PQ15**	**PQ16**
ÖK1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
ÖK2	1	1	1	1	1	1	1	1	2	4	1	1	1	1	3	1
ÖK3	1	1	1	1	1	1	1	1	1	2	2	3	3	1	1	1
ÖK4	1	1	1	1	1	1	1	1	1	2	2	4	3	1	1	1
ÖK5	1	2	1	1	4	2	1	2	2	3	1	1	2	1	2	1
ÖK6	3	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1
LO: Learning Objectives PQ: Program Qualifications																
Contribution Level:	**1 very low**		**2 low**			**3 Medium**				**4 High**			**5 Very High**			