APPLICATIONS IN SCIENCE TECHNOLOGY

1	Course Title:	APPLICATIONS IN SCIENCE TECHNOLOGY
2	Course Code:	FEN0001
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:	Doç. Dr. NURCAN KAHRAMAN
15	Course Lecturers:	Arş.Gör. SEMA NUR GÜNGÖR
16	Contact information of the Course Coordinator:	Doç. Dr. Nurcan Kahraman nurcankahraman@uludag.edu.tr Bursa Uludağ Üniversitesi, Eğitim Fak. Matematik ve Fen Bilimleri Eğitimi Bölümü,
17	Website:	
18	Objective of the Course:	This course aims to discuss the technological implications of science.
19	Contribution of the Course to Professional Development:	This course related to students' content knowledge that is a sub title of "teacher professional knowledge".
20	Learning Outcomes:	

	1	Explains the relation between science and technology.
	2	Gives examples of the usage of semiconductors.
	3	Explains laser technology and its implications.
	4	Defines superconductors.
	5	Gives examples of communication technologies.
	6	Gives examples of water production technologies.
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21	Course Content:	
	Course Content:	
Week	Theoretical	Practice
1	Introduction	
2	The relation between Science and Technology	
3	Semi conductors and their usage	
4	Laser and aplications	
5	Super conductors	

6	Communication technologies	
7	Nanotechnology	
8	Visulisation techniques	
9	Technology and greenhouse gas	
10	Water production technologies	
11	Chemical pollution	
12	Genetically modified organism	
13	Space technologies	
14	Evaluation	

22	Textbooks, References and/or Other Materials:	Yener, D. (Ed.) (2019). FİZİĞİN BİLİM VE TEKNOLOJİDEKİ UYGULAMALARI. Pegem Akademi Ayvacı H. Ş., Çepni S.(Ed.) (2020). Bilimin Teknolojideki Uygulamaları. Pegem Akademi
23	Assesment	

TERM LEARNING ACTIVITIES	**NUMBER**	**WEIGHT**
Midterm Exam	1	40.00
Quiz	0	0.00
Home work-project	0	0.00
Final Exam	1	60.00
Total	2	100.00
Contribution of Term (Year) Learning Activities to Success Grade		40.00
Contribution of Final Exam to Success Grade		60.00
Total		100.00
Measurement and Evaluation Techniques Used in the Course		During the semester, students will be responsible performance tasks. Besides, a final exam with open-ended questions will be conducted at the end of the semester.

24 ECTS / WORK LOAD TABLE

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	14	4.00	56.00
Homeworks	0	0.00	0.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	12.00	12.00
Others	0	0.00	0.00
Final Exams	1	24.00	24.00
Total Work Load			120.00
Total work load/ 30 hr			4.00
ECTS Credit of the Course			4.00

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	5	4	1	1	4	1	1	1	5	1	1	1	1	1	1	1
ÖK2	5	4	1	1	4	1	1	1	5	1	1	1	1	1	1	1
ÖK3	5	4	1	1	4	1	1	1	5	1	1	1	1	1	1	1
ÖK4	5	4	1	1	4	1	1	1	5	1	1	1	1	1	1	1
ÖK5	5	4	1	1	4	1	1	1	5	1	1	1	1	1	1	1
ÖK6	5	4	1	1	4	1	1	1	5	1	1	1	1	1	1	1
LO: Learning Objectives PQ: Program Qualifications																
Contribution Level:	**1 very low**		**2 low**			**3 Medium**				**4 High**			**5 Very High**			