PHILOSOPHY OF MODERN SCIENCE II

1	Course Title:	PHILOSOPHY OF MODERN SCIENCE II
2	Course Code:	FEL6118
3	Type of Course:	Optional
4	Level of Course:	Third Cycle
5	Year of Study:	1
6	Semester:	2
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:	Prof. Dr. ABDÜLKADIR ÇÜÇEN
15	Course Lecturers:	Prof. Dr. ABDÜLKADIR ÇÜÇEN
16	Contact information of the Course Coordinator:	Kadir@uludag.edu.tr; Uludag Üniversitesi Felsefe Bölümü Fen-Edebiyat Fakültesi, 16059 Görükle, Bursa - Türkiye. Tel: +90 224 2941826
17	Website:	
18	Objective of the Course:	To teach the main problems and important stages of contemporary philosophy of science and to get intense knowledge about its representatives.
19	Contribution of the Course to Professional Development:	
20	Learning Outcomes:	
	1	Learning important stages in history of contemporary philosophy of science and to use them in terms of science-society relations.
	2	Learning contemporary problems of science and the character of scientific knowledge.
	3	Being able to evaluate scientific explanations and arguments and developments about science with arguments of Contemporary Philosophy of Science
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21	Course Content:	

Course Content:

Week	Theoretical	Practice
1	Structure of universe Aristotle and Ptolemy	
2	Copernicus, Brahe, Kepler and Scientific Revolutions	

3	Galileo and Heliocentric Universe	
4	Emergence of Newtonian World Conception	
5	Einstein's theory of relativity	
6	Quantum theory	
7	Demarcation problem in science; discussion of scientific criterion	
8	Logical Positivism or Vienna circle	
9	Popper and falsificationism; Lakatos; Duhem and Meyerson	
10	History of science in Koyre, Duhem-Quine	
11	T Kuhn, Scientific Revolution and Paradigmatic Justification	
12	J. Ziman and Social Aspect of Science, L. Laudan	
13	General evalution	
14	General evalution	

22	Textbooks, References and/or Other Materials:	1. Bacon, Francis, New Organon, (Çev: Sema Önal Akkaş), Ankara: Doruk Yayınları, 1999. 2. Bochenski, J. M., Çağdaş Düşünme Yöntemleri, (Çev: Talip Kabadayı) Ankara: Bilgesu, 2008. 3. Descartes, Rene, Metot Üzerine Konuşma, (çev. Kadir Sel), İstanbul: Sosyal yayınları, 1995. 4. Duhem, Pierre, The Aim and The Structure of a Yayınları, 2010 6. Kabadayı, Talip, Yanlışlanabilirlik Ölçütüne Yönelik 7. Koyré, Alexandre, Yeniçağ Biliminin Doğuşu, (Çev. Felsefecileri, Ankara: Bilgesu Yayınları, 2010. 10. Kabadayı, Talip, Yanlışlanabilirlik Ölçütüne Yönelik 11. Kabadayı, Talip,, ´Bilim´ Tasarımlarının Kısa Tarihi, Kurtuluş Dinçer), Ankara: Gündoğan Yayınları, 1994 14. Meyerson, Émile, Identity & Reality, (Çev. Kate Loewenberg) London: The Macmillan Company, 1930 15. Ayer, Alfred J., Dil, Doğruluk ve Mantık, (Çev. Vehbi Hacıkadiroğlu), İstanbul: Metis Yayınları, 1998 17. Güzel, Cemal (Ed.). Sağduyu Filozofu: Popper, Ankara: Bilim ve Sanat Yayınları, 1996 18. Güzel, Cemal (Ed.). Çoğulculuğun Kuramcısı: Lakatos, Ankara: Bilim ve Sanat Yayınları, 1999 19. Güzel, Cemal, Bilim Felsefesi, Ankara: Kırmızı Yayınları, 2010. 20. Sober, Elliott, Biyoloji Felsefesi, Ankara: İmge Yayınevi, 2009.

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	5.00	70.00
Homeworks	0	0.00	0.00
Projects	0	0.00	0.00
Field Studies	0	0.00	0.00
Midterm exams	1	10.00	10.00
Others	0	0.00	0.00
Final Exams	1	12.00	12.00
Total Work Load			120.00
Total work load/ 30 hr			4.00
ECTS Credit of the Course			4.00

23	Assesment	

TERM LEARNING ACTIVITIES	**NUMBER**	**WEIGHT**
Midterm Exam	1	30.00

Quiz	0	0.00
Home work-project	5	20.00
Final Exam	1	50.00
Total	7	100.00
Contribution of Term (Year) Learning Activities to Success Grade		50.00
Contribution of Final Exam to Success Grade		50.00
Total		100.00
Measurement and Evaluation Techniques Used in the Course		

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	4	4	4	5	5	3	4	5	4	4	4	3	2	2	0	0
ÖK2	4	5	3	3	4	4	3	5	4	3	4	5	3	3	0	0
ÖK3	4	5	5	4	4	4	3	4	3	4	4	4	3	4	0	0

LO: Learning Objectives PQ: Program Qualifications

Contribution Level:	**1 very low**	**2 low**	**3 Medium**	**4 High**	**5 Very High**