



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		History and Philosophy of Science							
Course Code		EPÖ595		Course Level		Second Cycle (Master's Degree)			
ECTS Credit	5	Workload	125 (<i>Hours</i>)	Theory	3	Practice	0	Laboratory	0
Objectives of the Course		The aim of this course is to enable the students to explain ontological and epistemological assumptions of basic scientific paradigms, approaches to scientific knowledge and research methods and techniques of the science, and to give a summary about unique characteristics of scientific knowledge.							
Course Content		The necessity of knowledge in terms of ontology, the purpose of the knowledge, history of knowledge, sources of human knowledge, types of knowledge, the accuracy of knowledge, historical development of Western knowledge, Origin and evolution of scientific knowledge, criterion, subject and field of scientific knowledge, basic scientific paradigms, basic scientific approaches, scientific method and research techniques, basic criticism of scientific knowledge.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Individual Study					
Name of Lecturer(s)									

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	60

Recommended or Required Reading

1	Ömer Demir, Bilim Felsefesi, Vadi Yayınları, 4. baskı, Ankara, 2009.
2	Colin A. Ronan, Bilim Tarihi. Dünya Kültürlerinde Bilimin Tarihi ve Gelişmesi, Tübitak Yayınları, Ankara, 2005.
3	Alexandre Koyre, Bilim Tarihi Yazıları, Tübitak Yayınları, Ankara, 2004.

Week	Weekly Detailed Course Contents	
1	Theoretical	Ontological necessity, aim and history of knowledge
2	Theoretical	Sources of human knowledge
3	Theoretical	Types of knowledge
4	Theoretical	The accuracy problem in knowledge
5	Theoretical	Ontological basis of western knowledge and basic theories of knowledge
6	Theoretical	Historical development of western knowledge: The birth and development of scientific knowledge
7	Theoretical	Criterion, definition, subject, aim and characteristics of scientific knowledge
8	Intermediate Exam	Midterm Exam
9	Theoretical	Basics approaches to social sciences: Positivist science approach, basic assumptions, methods and techniques
10	Theoretical	Approaches on Positivist conception of science
11	Theoretical	Criticism of positivism
12	Theoretical	Hermeneutic approaches, basic assumptions, methods and techniques
13	Theoretical	Holistic approaches, basic assumptions, methods and research techniques
14	Theoretical	Basics approaches to social sciences: Positivist science approach, basic assumptions, methods and techniques
15	Theoretical	Overall evaluation of the course
16	Final Exam	Final Exam

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	3	56
Assignment	7	5	1	42
Reading	7	0	2	14



Midterm Examination	1	5	1	6
Final Examination	1	5	2	7
Total Workload (Hours)				125
[Total Workload (Hours) / 25*] = ECTS				5
*25 hour workload is accepted as 1 ECTS				

Learning Outcomes

1	Express the definition, target, history, resources and features of science.
2	Analyse the question of the accuracy of knowledge with forms of knowledge in causality relationship.
3	Evaluate the birth and development of scientific knowledge of western knowledge together with socio- cultural reasons.
4	Analyse the basic characteristics, methods and techniques of scientific knowledge by comparing it with other types of knowledge.
5	Take part in research on the history of science.

Programme Outcomes (Curriculum and Instruction Master's Without Thesis)

1	To be able to use the basic concepts in the field of Curriculum Development and Instruction correctly
2	To be able to comprehend philosophical, social, historical and psychological principles influencing curriculum
3	To be able to analyze theoretical bases of learning-teaching theories and approaches
4	To be able to evaluate any curriculum in accordance with scientific principles
5	To be able to prepare a curriculum design cooperatively in accordance with principles and criteria
6	To be able to follow contemporary implementations, and national and international academic publications
7	To be able to prioritize scientific methods and ethical principles in educational sciences while considering and implementing field specific professional issues
8	To be willing to do scientific research in the field of Curriculum and Instruction
9	To be able to appreciate curriculum development profession as a professional identity

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

