

Course Information

COURSE INFORMATION

Course Title	Code	Semester	L+U Hour	Credits	ECTS
Philosophy of Science	USD2	6	2 + 0	2	3.0

Prerequisites

None

Language of Instruction

Turkish

Course Level

Undergraduate

Course Type

Elective

Mode of delivery

Face to face

Course Coordinator

Instructor

Asisst. Prof. Kadriye ERGÜN

Assistants

Goals

To discuss the nature of science, its nature, the relationship between scientific theories and reality, and the problem of methodology in science.

Course Content

Learning Outcomes

- 1) Explain the purpose of science.
- 2) Can express the problem of limitation in science.
- 3) Can explain and use the physical processes of scientific method, observation, experiment and measurement.
- 4) They can recognize the basic theories of scientific explanations and explain the reasons put forward for them.
- 5) Analyze the topics examined in the philosophical sense.

COURSE CONTENT

Week	Topics	Teaching and Learning Methods and Techniques	Study Materials
1. Week	Basic Concepts in Philosophy	Lecture	
2. Week	What is Science ?, The Subject of Science	Lecture	
3. Week	Scientific Method	Lecture and research homework	
4. Week	Observation	Lecture and research homework	
5. Week	Experiment	Lecture and research homework	
6. Week	Measuring	Lecture and research homework	
7. Week	Scientific Explanation	Lecture and research homework	
8. Week	Scientific Explanation	Lecture and research homework	
9. Week	The Structure of Scientific Theories	Lecture and research homework	
10. Week	Scientific Theories, Scientific Theories	Lecture and research homework	
11. Week	Consolidation of Scientific Hypotheses	Lecture and research homework	
12. Week	Consolidation of Scientific Hypotheses	Lecture and research homework	
13. Week	Development of Scientific Theories	Lecture and research homework	
14. Week	Development of Scientific Theories	Lecture and research homework	

RESOURCES

Recommended Sources

Bilim Felsefesi, Açıköğretim Fakültesi Yayını.
Bilim Felsefesine Giriş, Kadir Çüçen, Sentez Yayıncılık,
Bilim Felsefesi, Philipp Frank, Say Yayınları, 2017.

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ASSESSMENT

Examination

Measurement and Evaluation Methods and Techniques

COURSE CATEGORY

Basic Vocational Courses
Engineering Sciences
Engineering Design

Course Category

CONTRIBUTION OF COURSE LEARNING OUTCOMES TO PROGRAMME OUTCOMES

Program Requirements	Contribution Level	DK1	DK2	DK3	DK4	DK5	Measurement Method
PY3	5	5	5	5	5	5	1,5
PY5	4	4	4	4	4	4	1,5
PY7	5	5	5	5	5	5	1,5
PY9	5	5	5	5	5	5	1,5
PY10	5	5	5	5	5	5	1,5

*DK = Course's Contribution.

	1	2	3	4
Level of contribution	Very Low	Low	Fair	High
Method of assessment/evaluation	Written exam	Oral Exams	Assignment/Project	Laboratory work

ECTS CREDITS AND COURSE WORKLOAD

Event	Quantity	Duration (Hour)	Total Workload (Hour)
Lecture	14	2	28
Study	14	2	28
Final Examination	1	4	4
Midterm 1	1	5	4
Assignment 1	1	1	8
Total Workload	72		
Total Workload / 25.5 (s)	2,8		
Ects Credit of the Course	3		

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