

COURSE OUTLINE

1. GENERAL INFORMATION

LECTURER	Jannis Pissis		
SEMESTER (fall/spring)	Spring		
SCHOOL	PHILOSOPHY		
DEPARTMENT	PHILOSOPHY AND SOCIAL STUDIES		
LEVEL	Undergraduate		
COURSE CODE	Φ110	SEMESTER OF STUDIES (1-8)	3-8
COURSE TITLE	Philosophy of Science		
INDEPENDENT TEACHING ACTIVITIES		WEEKLY LECTURE HOURS	ECTS CREDITS
		3	5
COURSE CLASSIFICATION	Lecture – Mandatory course		
COURSE TYPE	Background – General knowledge		
TEACHING COMPETENCE COURSE	No		
PREREQUISITES	No		
TEACHING AND EXAMINATION LANGUAGE	Greek (Erasmus students can be given tutorials as well as take their exam in English or German)		
AVAILABLE FOR ERASMUS STUDENTS	Yes (see above)		
COURSE URL			

2. LEARNING OUTCOMES

After successfully completing the course, the students

- will have become familiar with the major chapters in the philosophy of science of the 20th century (from logical positivism to the historical turn) and will be able to assess what was at stake in the respective controversies
- will have become familiar with concepts that are crucial for their further studies, such as the notions of scientific explanation, of scientific law, of the object of a particular science
- will have puzzled over scientific rationality and the idea of scientific progress and will have acquired the capacity to adopt a critical view towards naïve positions in the matter
- will have thought about the relation between philosophy and the particular sciences, as well as among the sciences themselves, and about the questions regarding interdisciplinary work
- will have reflected on the relation between natural and social sciences and will have acquired the capacity to critically assess possible transfers of models and methods

COURSE OBJECTIVES

Independent work

Team work

Engagement in interdisciplinarity

Practicing criticism and self-criticism

Promotion of independent, creative and constructive thought

3. COURSE CONTENT

In this introductory course we will study (a) the main philosophical questions concerning science, i.e. questions about: the notions of scientific explanation and scientific law, the notion of scientific rationality and the idea of scientific progress, the object of a science and the idea of the unity of science, the relation between natural and social sciences, the relation between philosophy and the particular sciences. In that context, we will survey (b) the major chapters in the philosophy of science of the 20th century: the logical positivism of the Vienna Circle, Popper's fallibilism, Duhem's and Quine's holistic theses, the historical turn of the 1960's (Kuhn, Lakatos, Feyerabend).

4. TEACHING AND ASSESSMENT METHODS

TEACHING METHOD	Face to face		
USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES	Use of the platform UoC-eLearn for distributing course material and for communicating with students		
COURSE STRUCTURE	ACTIVITIES	SEMESTER WORKLOAD	
	Lecture attendance	39	

	Study of literature	40	
	Preparation for exam	42	
	Written Exam	3	
	TOTAL	124	
ASSESSMENT METHOD	Written exam		

5. RECOMMENDED READING

<ol style="list-style-type: none"> 1. Kent W. Staley, <i>An Introduction to the Philosophy of Science</i>, Cambridge UP, Cambridge 2014. 2. A.F. Chalmers, <i>What is this thing called science? An assessment of the nature and status of science and its methods</i>, University of Queensland Press, St. Lucia 1992 (Greek translation: Crete UP 1994). 3. Thomas S. Kuhn, <i>The structure of scientific revolutions</i>, University of Chicago Press, Chicago 1962 (Greek translation: Synchrona Themata, Athens 1997).
