GDAŃSK UNIVERSITY OF TECHNOLOGY

Subject card

Subject name and code	, PG_00072681		
Field of study	Transport and Logistics		
Date of commencement of studies	October 2023	Academic year of realisation of subject	2026/2027
Education level	first-cycle studies	Subject group	
Mode of study	Full-time studies	Mode of delivery	at the university
Year of study	4	Language of instruction	Polish
Semester of study	7	ECTS credits	1.0
Learning profile	general academic profile	Assessment form	assessment
Conducting unit	Department of Philosophy and Science Methodology -> Faculty of Management and Economics -> Faculties of Gdańsk University of Technology		
Name and surname of lecturer (lecturers)	Subject supervisor	dr hab. Przemysław Parszutowicz	
	Teachers		

Lesson types

Lesson type	Lecture	Tutorial	Laboratory	Project	Seminar	SUM
Number of study hours	15.0	0.0	0.0	0.0	0.0	15

E-learning hours included: 0.0

Learning activity and number of study hours

Learning activity	Participation in didactic classes included in study plan	Participation in consultation hours	Self-study	SUM
Number of study hours	15	0.0	0.0	15

Subject objectives

The aim of the course is to introduce students to the key questions concerning science: what scientific knowledge is, what scientific method consists in, how concepts and theories are formed, and how science can be distinguished from pseudoscience and so-called alternative explanations. The course presents classical and contemporary ways of understanding science and develops the ability to critically analyze claims to scientific status.

Learning outcomes

Course outcome	Subject outcome	Method of verification
[K6_K71] is able to explain the need to apply knowledge from humanistic, social, economic or legal sciences in order to function in a social environment	The student is able to critically assess claims to scientific status appearing in public debate, the media, popular culture, and social practices. The student understands the importance of sound argumentation, conceptual clarity, and intellectual responsibility when appealing to the authority of science.	[SK2] Assessment of progress of work
[K6_W71] has general knowledge in humanistic, social, economic or legal sciences, including their fundamentals and applications	The student is able to explain the specific character of theoretical sciences, both in the humanities and in the exact sciences. The student also recognizes the main problems and concepts of contemporary philosophy of science and knows the arguments used to justify them.	[SW1] Assessment of factual knowledge
[K6_U71] is able to apply knowledge from humanistic, social, economic or legal sciences in order to solve problems	The student is able to explain the specific character of theoretical sciences, both in the humanities and in the exact sciences. The student also recognizes the main problems and concepts of contemporary philosophy of science and knows the arguments used to justify them.	[SU3] Assessment of ability to use knowledge gained from the subject

<table>
<tr><td>Subject contents</td><td>Course content – lecture

The philosophical concept of science and its history; the concept of scientific method; the humanities, natural sciences, and exact sciences differences and points of convergence; the positivist method and its assumptions; the transcendental method and its assumptions the problem of synthetic a priori judgments; the specific character of scientific concepts and the principles of their construction in the exact sciences; the specific character of scientific concepts and the principles of their construction in the humanities; main problems of epistemology and the philosophy of science; the role of experiment in scientific knowledge; the problem of induction; Karl Poppers falsificationism; Thomas S. Kuhns theory of scientific revolutions; Paul Feyerabends methodological anarchism; the problem of the demarcation of science; science, pseudoscience, and so-called alternative explanations.</td></tr>
<tr><td>Prerequisites and co-requisites</td><td></td></tr>
<tr><td>Assessment methods and criteria</td><td><table>
<tr><th>Subject passing criteria</th><th>Passing threshold</th><th>Percentage of the final grade</th></tr>
<tr><td>final test</td><td>50.0%</td><td>100.0%</td></tr>
</table></td></tr>
<tr><td>Recommended reading</td><td><table>
<tr><td>Basic literature</td><td>Alan F. Chalmers, Czym jest to, co zwiemy nauką? Rozważania o naturze, statusie i metodach nauki, przeł. A. Chmielewski, Wrocław 1997.

Marian Grabowski, Elementy filozofii nauki, Toruń 2000.</td></tr>
<tr><td>Supplementary literature</td><td>Władysław Tatarkiewicz, Historia filozofii, t. 1-3, Warszawa, wyd. dowolne wybrane fragmenty.

Samir Okasha, Philosophy of Science: A Very Short Introduction, wyd. 2, Oxford 2016.</td></tr>
<tr><td>eResources addresses</td><td></td></tr>
</table></td></tr>
<tr><td>Example issues/ example questions/ tasks being completed</td><td>Explain the basic concepts of the philosophy of science; discuss the main assumptions of the positivist method and the basic principles of scientific concept formation; present selected concepts of the demarcation of science and the main approaches in twentieth-century philosophy of science. Discuss the mechanisms through which pseudoscientific theories and so-called alternative explanations emerge and spread.</td></tr>
<tr><td>Practical activites within the subject</td><td>Not applicable</td></tr>
</table>

Document generated electronically. Does not require a seal or signature.