

Knowledge in Context

Educational subject description sheet

Basic information

Study programme Liberal Arts and Sciences (English programme)		Didactic cycle 2024/25
Speciality -		Subject code 18LENS.12P.02955.24
Organizational unit Faculty of History		Lecture languages English
Study level First-cycle programme		Course type Obligatory
Study form Full-time		Block Basic subjects
Education profile General academic		
Subject coordinator	Rafał Wierchosławski	
Lecturer	Rafał Wierchosławski	
Period Semester 2	Activities and hours • Lecture: 30, Graded credit	Number of ECTS points 4

Goals

Code	Goal
C1	drawing attention to the phenomenon of science in the process of the emergence of scientific knowledge from other types of human knowledge in social framework and its further transformation in history
C2	presentation of the most important paradigms of European science (Aristotle, Galileo-Newton, Comte and positivism, Popper and post-positivism) are presented in context of history of science, i.e. the question of the unity of science in its development (emphasis on the context of justification)
C3	presenting multidimensional conditions for the development and transformation of particular scientific disciplines, taking into account the socio-cultural-institutional context (the context of discovery and the perspective of the STS).
C4	drawing attention to the diversity of knowledge and its social recognition (institutions, education process, research), the proposed autonomy of the Academia and its social responsibility towards society, the problem of financing science (state, private-state partnership, foundations), access to the results and fruits of scientific research (universalism vs. commercialization), side effects related to scientific and technological progress (risk society and environmental threats).
C5	discussing different development phases of science (characterized by different/individual disciplines and general tendencies in science) in the history of e.g. ancient and medieval science (in search of essence), modern scientific revolution (mathematical natural science) and its consequences, the formation of modern science of the 19th century (industrial revolution) and its modification in the scientific and technical revolution of the 20th century (different phases of industrial society, post-industrial, knowledge and information-based society), we focus on possible development and paths-dependencies of science and technology in the 21st century.
C6	discussion of the problem of universal character of scientific rationality in the context of other types of human knowledge (indigenous, local, religious and philosophical); the demarcation of science and non-science (pseudo-science, proto-science). The importance of scientific institutions, social and economic mechanisms, scientific culture and state scientific policy (entrepreneurial state) for innovation in science and technology.

Entry requirements

There are no prerequisites.

Subject learning outcomes

Code	Outcomes in terms of	Learning outcomes	Examination methods
Knowledge - Student:			
W1	can describe basic scientific methods in the course of history	LEN_K1_W01, LEN_K1_W02, LEN_K1_W04, LEN_K1_W07, LEN_K1_W08, LEN_K1_W09, LEN_K1_W10	Written colloquium, Oral colloquium
W2	can describe main periods of the development of science	LEN_K1_W01, LEN_K1_W02, LEN_K1_W04, LEN_K1_W07, LEN_K1_W08, LEN_K1_W09, LEN_K1_W10	Written colloquium, Oral colloquium

Code	Outcomes in terms of	Learning outcomes	Examination methods
W3	can describe science as a specific form of human knowledge, especially it's rationality	LEN_K1_W01, LEN_K1_W02, LEN_K1_W04, LEN_K1_W05, LEN_K1_W07, LEN_K1_W08, LEN_K1_W09, LEN_K1_W10	Written colloquium, Oral colloquium
W4	can describe impact of knowledge development on social, economical and political issues (with a focus on factors of innovation)	LEN_K1_W01, LEN_K1_W02, LEN_K1_W04, LEN_K1_W06, LEN_K1_W07, LEN_K1_W08, LEN_K1_W09, LEN_K1_W10	Written colloquium, Oral colloquium

Study content

No.	Course content	Subject learning outcomes	Activities
1.	Scientific methods in the historical process and in the social context	W1, W2	Lecture
2.	Development of specific scientific fields and their transition from the stage of proto-discipline to maturity – scientific specialisation.	W1, W2	Lecture
3.	Rationality of science - universalism vs. relativism.	W3	Lecture
4.	Criteria differentiating science from other forms of human knowledge.	W2, W3	Lecture
5.	Problem of innovativeness in the context of scientific institutions, funding of science and scientific policies.	W1, W2, W4	Lecture

Additional information

Activities	Teaching and learning methods and activities
Lecture	Conversation lecture, Work with text, Case study, Classes method

Activities	Credit conditions
Lecture	<p>The form of course credit (oral or written) is to be selected according to students' preferences .</p> <p>Grade scale:</p> <p>very good (bdb; 5.0): achievement by the student of at least 90% of the expected learning outcomes</p> <p>good plus (+db; 4.5): achievement by the student of at least 80% of the expected learning outcomes</p> <p>good (db; 4.0): achievement by the student of at least 70% of the expected learning outcomes</p> <p>Sufficient plus (+dst; 3.5): Achievement of expected learning outcomes by the student at a minimum of 60%.</p> <p>Sufficient (dst; 3.0): Achievement of at least 50% of the expected learning outcomes.</p> <p>unsatisfactory (ndst; 2.0): the student does not achieve the expected learning outcomes.</p>

Literature

Obligatory

1. Znaniecki F., The Social Role of the Man of Knowledge, Transaction Books, New Brunswick 1986.
2. The Cambridge History of Science, Vol. 1-8, Cambridge University Press, 2002-2020.
3. Writing the History of the Humanities: Questions, Themes, and Approaches, ed. P. Herman, Bloomsbury Academic, 2023.

Optional

1. Bernal J. D., Science in History, vol. 1-4, Penguin Books, 1965.
2. Science and Ideology. A comparative history, ed. M. Walker, Routledge, 2003.
3. The Historiography Of Contemporary Science, Technology and Medicine. Writing Recent Science, ed. R E. Doel, T. Soderqvist, Routledge, 2006.
4. Godin B., Innovation Contested, The Idea of Innovation over the Centuries, Taylor & Francis, 2015.

Calculation of ECTS points

Activities	Activity hours*
Lecture	30
Reading the indicated literature	45
Preparation for the assessment	45
Student workload	Hours 120
Number of ECTS points	ECTS 4

* academic hour = 45 minutes

Efekty uczenia się dla kierunku

Kod	Treść
LEN_K1_W01	The graduate knows and understands philosophical approaches defining the role, and goals of science and its place in European civilization over the centuries
LEN_K1_W02	The graduate knows and understands selected aspects of the history of the Artes Liberales tradition and its interrelationships with contemporary scientific and didactic concepts
LEN_K1_W04	The graduate knows and understands the key terminology of the main disciplines in the humanities, social sciences, sciences and natural sciences
LEN_K1_W05	The graduate knows and understands determinants of research within the humanities and sciences in the era of the digital revolution
LEN_K1_W06	The graduate knows and understands principles and methods of research within the humanities and sciences
LEN_K1_W07	The graduate knows and understands stages of development of European civilization with its cultural, religious, economic and political characteristics
LEN_K1_W08	The graduate knows and understands the processes of development of the sciences and selected issues of contemporary research
LEN_K1_W09	The graduate knows and understands the processes of development of social sciences and selected issues of contemporary research
LEN_K1_W10	The graduate knows and understands the processes of development of experimental sciences and selected issues of contemporary research