



UNIwersYTET  
IM. ADAMA MICKIEWICZA  
W POZNANIU

## Knowledge in Context

### Educational subject description sheet

#### Basic information

|   |   |  |  |
|---|---|--|--|
| <b>Study programme</b><br>Liberal Arts and Sciences (English programme) |   | <b>Didactic cycle</b><br>2023/24           |  |
| <b>Speciality</b><br>-  |   | <b>Subject code</b><br>18LENS.12P.02955.23 |  |
| <b>Organizational unit</b><br>Faculty of History                        |   | <b>Lecture languages</b><br>English        |  |
| <b>Study level</b><br>First-cycle programme                             |   | <b>Course type</b><br>Obligatory           |  |
| <b>Study form</b><br>Full-time  |   | <b>Block</b><br>Basic subjects             |  |
| <b>Education profile</b><br>General academic                            |   |  |  |
| <b>Subject coordinator</b>  | Rafał Wierzchośłowski                                       |  |  |
| <b>Lecturer</b>   | Rafał Wierzchośłowski                                       |  |  |
| <b>Period</b><br>Semester 2   | <b>Activities and hours</b><br>• Lecture: 30, Graded credit | <b>Number of ECTS points</b><br>4          |  |

## Goals

| Code | Goal  |
|------|---|
| C1   | drawing attention to the phenomenon of science in the proces 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 paradigmes 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                 |
|-----------------------------|--|--|-------------------------------------|
| <b>Knowledge - Student:</b> |  |  |                                     |
| W1                          | can describe basic scientific methods in the course of history | LEN_K1_W01,<br>LEN_K1_W02,<br>LEN_K1_W04,<br>LEN_K1_W07,<br>LEN_K1_W08,<br>LEN_K1_W09,<br>LEN_K1_W10 | Written colloquium, Oral colloquium |
| W2                          | can describe main periods of the development of science        | LEN_K1_W01,<br>LEN_K1_W02,<br>LEN_K1_W04,<br>LEN_K1_W07,<br>LEN_K1_W08,<br>LEN_K1_W09,<br>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,<br>LEN_K1_W02,<br>LEN_K1_W04,<br>LEN_K1_W05,<br>LEN_K1_W07,<br>LEN_K1_W08,<br>LEN_K1_W09,<br>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,<br>LEN_K1_W02,<br>LEN_K1_W04,<br>LEN_K1_W06,<br>LEN_K1_W07,<br>LEN_K1_W08,<br>LEN_K1_W09,<br>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    | The form of course credit (oral or written) is to be selected according to students' preferences .<br>Grade scale:<br>very good (bdb; 5.0): achievement by the student of at least 90% of the expected learning outcomes<br>good plus (+db; 4.5): achievement by the student of at least 80% of the expected learning outcomes<br>good (db; 4.0): achievement by the student of at least 70% of the expected learning outcomes<br>Sufficient plus (+dst; 3.5): Achievement of expected learning outcomes by the student at a minimum of 60%.<br>Sufficient (dst; 3.0): Achievement of at least 50% of the expected learning outcomes.<br>unsatisfactory (ndst; 2.0): the student does not achieve the expected learning outcomes. |

## 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                  |
| <b>Student workload</b>          | <b>Hours</b><br>120 |
| <b>Number of ECTS points</b>     | <b>ECTS</b><br>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   |