

## Subject card

|                                             |                                                                                                                                                                                                                         |                                                          |                                         |                                     |                                                |            |     |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|-----------------------------------------|-------------------------------------|------------------------------------------------|------------|-----|
| Subject name and code                       | Logic in Practice, PG_00155970                                                                                                                                                                                          |                                                          |                                         |                                     |                                                |            |     |
| Field of study                              | Management of Healthcare Institutions                                                                                                                                                                                   |                                                          |                                         |                                     |                                                |            |     |
| Date of commencement of studies             | October 2024                                                                                                                                                                                                            |                                                          | Academic year of realisation of subject |                                     | 2024/2025                                      |            |     |
| Education level                             | Bachelor's studies                                                                                                                                                                                                      |                                                          | Subject group                           |                                     | Obligatory subject group in the field of study |            |     |
| Mode of study                               | full-time studies                                                                                                                                                                                                       |                                                          | Mode of delivery                        |                                     | at the university                              |            |     |
| Year of study                               | 1                                                                                                                                                                                                                       |                                                          | Language of instruction                 |                                     | Polish                                         |            |     |
| Semester of study                           | 2                                                                                                                                                                                                                       |                                                          | ECTS credits                            |                                     | 3.0                                            |            |     |
| Learning profile                            | practical                                                                                                                                                                                                               |                                                          | Assessment form                         |                                     | credit                                         |            |     |
| Conducting unit                             | Zakład Zarządzania Organizacjami Publicznymi -> Department of Organisation and Management -> Faculty of Management -> Rector                                                                                            |                                                          |                                         |                                     |                                                |            |     |
| Name and surname of lecturer (lecturers)    | Subject supervisor                                                                                                                                                                                                      |                                                          | dr Piotr Zieliński                      |                                     |                                                |            |     |
|                                             | Teachers                                                                                                                                                                                                                |                                                          | dr Piotr Zieliński                      |                                     |                                                |            |     |
| Lesson types                                | Lesson type                                                                                                                                                                                                             | Lecture                                                  | Tutorial                                | Laboratory                          | Project                                        | Seminar    | SUM |
|                                             | Number of study hours                                                                                                                                                                                                   | 0.0                                                      | 15.0                                    | 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                                                       |                                         | 10.0                                |                                                | 50.0       | 75  |
| Subject objectives                          | The aim of the course is to provide students with basic information in the field of logical semiotics, general methodology of science and formal logic, with particular emphasis on elements useful in managerial work. |                                                          |                                         |                                     |                                                |            |     |

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| Learning outcomes                                              | Course outcome                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Subject outcome                                                                                                                                                                      | Method of verification                                                                                                      |
|                                                                | [ZISZL3_U04] The student is able to use the acquired knowledge from a specific area of management and quality sciences in professional practice, including the management of medical entities.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | - The student is able to use thought patterns to solve practical problems relating to the functioning of entities performing medical activities.                                     | [SU1] oral statement/conversation/discussion<br>[SU4] test/exam - oral or written<br>[SU5] implementation of a problem task |
|                                                                | [ZISZL3_U09] The student has the ability to formulate hypotheses and objectives and to solve a research problem using the literature on the subject and appropriately selected research methods.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | - The student is able to identify the problem and then construct questions in a correct manner and logically reach the appropriate conclusions.                                      | [SU1] oral statement/conversation/discussion<br>[SU4] test/exam - oral or written<br>[SU5] implementation of a problem task |
|                                                                | [ZISZL3_K07] The student correctly identifies and resolves dilemmas related to the profession.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | - The student analyses and reflectively assesses the compliance of the conduct of legal entities with legal norms.                                                                   | [SK1] oral statement/conversation/discussion<br>[SK4] test/exam - oral or written<br>[SK5] implementation of a problem task |
|                                                                | [ZISZL3_W02] The student has advanced knowledge and understanding of the interrelationships that exist between the disciplines of management and quality sciences, economics and finance, social communication and media sciences, legal and sociological sciences, which are key to understanding the essence of effective and efficient management of health care units.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | - The student has advanced knowledge of the relationships between different scientific disciplines.<br>- The student has advanced knowledge of the need for precise use of language. | [SW4] test/exam - oral or written<br>[SW1] oral statement/conversation/discussion<br>[SW5] implementation of a problem task |
|                                                                | [ZISZL3_W01] The student has advanced knowledge of the discipline of management and quality sciences and understands its interrelationships with other social sciences.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | - The student has advanced knowledge of the relationship between the disciplines of law, philosophy and the fields of science: social sciences and humanities.                       | [SW4] test/exam - oral or written<br>[SW1] oral statement/conversation/discussion<br>[SW5] implementation of a problem task |
|                                                                | [ZISZL3_K02] The student applies an analytical approach to problem solving, is able to independently search for solutions, as well as use expert opinions.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | - The student demonstrates creativity in using instruments of general logic within the framework of a manager's thought work.                                                        | [SK1] oral statement/conversation/discussion<br>[SK4] test/exam - oral or written<br>[SK5] implementation of a problem task |
|                                                                | [ZISZL3_K03] The student recognizes the complexity of social problems in the field of health care at the micro- and macro-structural level.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | - The student rationally evaluates the functioning of the health care system, drawing conclusions based on premises.                                                                 | [SK1] oral statement/conversation/discussion<br>[SK4] test/exam - oral or written<br>[SK5] implementation of a problem task |
| Subject contents                                               | 1. Language as a system of signs (language and its role in the work of a manager; sign, indication, trace; semantic rules; syntactic categories; syntactic analysis; semiotic functions of language).<br>2. Names (distribution of names; relations between scopes of names).<br>3. Definitions (essence, functions and structure of definitions; errors in defining; definitions in legal acts).<br>4. Logical division (essence and conditions of correctness of logical division; classification; typology and partition).<br>5. Classical propositional calculus and its language (sentence and its logical value; extensional functors; building logical functions).<br>6. Tautologies of classical propositional calculus (types of logical functions; binary method; abbreviated binary method).<br>7. System of natural deduction of classical propositional calculus (rules of inference and rules of proof; Code of inference rules for propositional calculus; rules for creating proofs). |                                                                                                                                                                                      |                                                                                                                             |
| Prerequisites and co-requisites                                | Knowledge of Polish at least at a communicative level.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                      |                                                                                                                             |
| Assessment methods and criteria                                | Subject passing criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Passing threshold                                                                                                                                                                    | Percentage of the final grade                                                                                               |
|                                                                | Colloquium with open questions                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | 51.0%                                                                                                                                                                                | 100.0%                                                                                                                      |
| Recommended reading                                            | Basic literature                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Nawrot O., Introduction to logic for lawyers, Warsaw 2024.                                                                                                                           |                                                                                                                             |
|                                                                | Supplementary literature                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Ziemiński Z., Practical Logic, Warsaw 2018 (26th ed.).                                                                                                                               |                                                                                                                             |
|                                                                | eResources addresses                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                      |                                                                                                                             |
| Example issues/<br>example questions/<br>tasks being completed | Write a definition of the sentence in a logical sense.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                      |                                                                                                                             |

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