

## Course description - Part 1

General information about the course		
<b>1. Major of study:</b> Nursing	<b>2. Study level:</b> first-degree studies/practical profile	
	<b>3. Form of study:</b> full-time	
<b>4. Year:</b> 1 /cycle 2025-2028	<b>5. Semester:</b> II	
<b>6. Course name:</b> Scientific of the nursing profession		
<b>7. Course status:</b> mandatory		
<b>8. Course objective(s):</b> Introduction to the nature of methodology as a scientific discipline, including its core terminology and detailed research methodology in nursing. Familiarization with the principles of research procedures. Acquisition of knowledge regarding fundamental research methods, techniques, and instruments applied in nursing research and clinical investigations. Awareness of the significance of scientific inquiry for the advancement of nursing and the role of professional nursing organizations. Development of competencies in conducting research in a responsible manner, in compliance with ethical and legal standards.		
<b>Learning outcomes / reference to the learning outcomes indicated in</b> (underline as appropriate): <u>education standards (Regulation of the Minister of Science and Higher Education) / Resolution of the Senate of the Medical University of Silesia</u> (indicate terms specified in education standards / codes of learning outcomes approved by the Resolution of the Senate of the Medical University of Silesia) For knowledge student knows and understands: D.W48.; D.W49.; D.W50.; D.W51.; D.W52.; D.W53. For skills student can do: D.U46, D.U47 For social competencies student is ready to: KS.1, KS.2, KS.3, KS.4, KS.5, KS.6, KS.7		
<b>9. Number of hours for the course</b>	25	<b>10. Number of ECTS points for the course</b> <span style="float: right;">1</span>
<b>11. Form of passing the course:</b> grade credit		
<b>12. Methods of verifying and assessing learning outcomes</b>		
Learning outcomes	Methods of verification	Methods of evaluation*
Knowledge	Written test / Assessment: graded multiple-choice test	*
Skills	Observation	*
Competencies	Observation	*

\* For exams and grade credits the following evaluation system has been assumed:

**Very good (5,0)** – the assumed learning outcomes have been achieved and significantly exceed the required level

**Better than good (4,5)** – the assumed learning outcomes have been achieved and slightly exceed the required level

**Good (4,0)** – the assumed learning outcomes have been achieved at the required level

**Better than satisfactory (3,5)** – the assumed learning outcomes have been achieved at the average required level

**Satisfactory (3,0)** – the assumed learning outcomes have been achieved at the minimum required level

**Unsatisfactory (2,0)** – the assumed learning outcomes have not been achieved.

## Course description

### Part 2

Other useful information about the course		
<p><b>13. Unit implementing the subject, address, e-mail:</b>            1/ Department of Gerontology and Geriatric Nursing            Address: ul. Ziołowa 47, room 118; 40-635 Katowice            Tel. +48 323 598 191            Email: katedrapielęgniarstwa@sum.edu.pl            Website address: <a href="http://pielgeriatryczne.sum.edu.pl">http://pielgeriatryczne.sum.edu.pl</a>            2/ <b>Department of Philosophy and Bioethics</b>            School of Health Sciences, Medical University of Silesia in Katowice            ul. Medyków 12, 40-752 Katowice            Tel. 32 208 86 45            Email: znh_sekretariat@sum.edu.pl            Contact: agralak@sum.edu.pl</p>		
<p><b>14. Name of the course coordinator:</b>            Dr Anita Gralak, PhD</p>		
<p><b>15. Prerequisite knowledge, skills and other competencies:</b>            No prior knowledge or skills are required.</p>		
<b>16. Number of students in groups</b>	In accordance with the Senate Resolution	
<b>17. Study materials</b>	Provided during classes by the course instructor.	
<b>18. Location of classes</b>	Faculty classrooms, as specified in the timetable.	
<b>19. Location and time for contact hours</b>	Information available on the notice board of the department conducting the course.	
20. Learning outcomes		
Number of the course learning outcome	Course learning outcomes	Reference to learning outcomes included in the standards
P_W01	the importance of scientific research for nursing practice and the development of the practice of nursing;	D.W48.
P_W02	nursing research organizations and their role in scientific research;	D.W49.
P_W03	the subject, purpose, and scope of scientific research and nursing paradigms;	D.W50.
P_W04	methods and techniques of conducting scientific research in nursing;	D.W51.
P_W05	ethical principles in conducting scientific research and basic legal regulations concerning copyright and intellectual property protection in nursing practice;	D.W52.
P_W06	basic principles of patient and medical staff participation in clinical trials.	D.W53.
P_U01	critically analyze published scientific research results and identify possibilities for their application in nursing practice;	D.U46.
P_U02	apply legal regulations concerning copyright and intellectual property protection in professional nursing practice.	D.U47.
P_K1	act in the patient's best interest, respect the dignity and autonomy of individuals under care, demonstrate understanding of worldview and cultural differences, and show empathy in relationships with the patient, their family, or caregiver;	P_KS.1
P_K2	observe patients' rights and the principles of humanism;	P_KS.2
P_K3	perform the profession independently and reliably in accordance with ethical principles, including adherence to moral values and duties in patient care;	P_KS.3
P_K4	take responsibility for one's professional actions;	P_KS.4
P_K5	consult experts when unable to resolve an issue independently;	P_KS.5
P_K6	anticipate and consider factors influencing their own and the patient's reactions;	P_KS.6

P_K7	recognize and acknowledge their own limitations in knowledge, skills, and social competences, and conduct self-assessment of deficits and educational needs.	P_KS.7
<b>21. Forms and topics of classes</b>		<b>Number of hours</b>
<b>21.1. Lectures</b>		<b>10</b>
<b>Methodology</b>		
<ul style="list-style-type: none"> <li>• Introduction to basic terminology and research areas in nursing</li> <li>• The concept of a paradigm; paradigms in nursing</li> <li>• Quantitative and qualitative research methods in nursing</li> <li>• Research methods, techniques, and tools used in nursing science</li> <li>• Ethical aspects of scientific research, copyright law, and protection of intellectual and industrial property in nursing</li> </ul>		5
<b>Types of scientific research and their relevance to nursing</b>		
<ul style="list-style-type: none"> <li>• The nature and significance of research in nursing</li> <li>• Theoretical models of nursing</li> <li>• Application of scientific research in nursing practice</li> <li>• Nursing research organizations and their role in scientific inquiry</li> <li>• Academic journals as platforms for disseminating research findings</li> <li>• Principles of preparing materials for publication</li> </ul>		5
<b>21.2. Seminars</b>		<b>15</b>
<b>Principles of conducting quantitative and qualitative research in nursing</b>		
<ul style="list-style-type: none"> <li>• Surveys, observation, and experimentation – research designs</li> <li>• Distinction between correlation and causation</li> <li>• Clinical trial designs</li> <li>• Role of Bioethics Committees</li> </ul>		5
<b>Examples of nursing research projects</b>		
<ul style="list-style-type: none"> <li>• Principles of project design, critical review, and potential application in professional nursing practice</li> </ul>		
<b>Standardized tests and scales used in nursing – selected examples</b>		
<ul style="list-style-type: none"> <li>• Practical group exercise: designing an original research questionnaire</li> </ul>		5
<b>Current state, directions, and scope of nursing research</b>		
<ul style="list-style-type: none"> <li>• Analysis based on global, European, and national reports and literature</li> <li>• Limitations in applying research findings to nursing practice</li> <li>• Principles of preparing materials for publication</li> <li>• Use of standardized survey questionnaires in nursing</li> </ul>		5
<b>21.3. Self-education (dr Anita Gralak, PhD)</b>		<b>20</b>
<ul style="list-style-type: none"> <li>• Group preparation of a sample experimental research design, including control of confounding variables and placebo effect (e.g., the role of randomization, appropriate selection of control groups, and blinding of participants, medical staff, and analysts)</li> </ul>		10
<ul style="list-style-type: none"> <li>• Critical analysis of a scientific article published in a nursing journal, based on the following criteria: relevance to the topic, clarity of research objectives, description of the study group and methodology, method of data analysis and presentation of results, quality of discussion, references, and overall value of the article in terms of methodology, cognitive contribution, and practical application</li> </ul>		10
<b>22. Readings</b>		
<ol style="list-style-type: none"> <li>1. Jirojwong, S et al. Research Methods in Nursing and Midwifery: Pathways to evidence-based practice. Oxford University Press. 2011.</li> <li>2. Cluett, Elizabeth. “Chapter 2: Evidence Based Practice”. Principles and Practice of Research in Midwifery. 2nd edition. Churchill Livingstone Elsevier. 2006</li> <li>3. Polit, D. F., &amp; Beck, C. T. (2008). Nursing research: Generating and assessing evidence for nursing practice. New York: Wolters Kluwer/Lippincott Williams &amp; Wilkins.</li> </ol>		
<b>23. Detail evaluation criteria</b>		

In accordance with the recommendations of the inspection bodies,  
Completion of the course – student has achieved the assumed learning outcomes,  
Detail criteria for completion and evaluation of the course are specified in the course regulations