

**A COURSE SYLLABUS – DOCTORAL SCHOOL**  
**regarding the qualification cycle from 2025/2026 to 2028/2029**

<b>GENERAL INFORMATION ABOUT COURSE</b>				
Course title	<b>RESEARCH METHODOLOGY</b>			
Name of the unit running the course	Doctoral School of the University of Rzeszów			
Type of course ( <i>obligatory, optional</i> )	compulsory			
Year and semester of studies	First year/First and second semester			
Discipline	<b>medical sciences</b>			
Language of Course	Polish language			
Name of Course coordinator	<b>Dr hab. n. med. Dorota Bartusik-Aebisher, prof. UR</b>			
Name of Course lecturer	<b>Dr hab. n. med. Dorota Bartusik-Aebisher, prof. UR</b>			
Prerequisites	Knowledge, skills and social competences related to the methodology of conducting scientific research, achieved at level 7 of the Polish Qualifications Framework in the discipline of medical sciences.			
<b>BRIEF DESCRIPTION OF COURSE</b> (100-200 words)				
As part of the course 'Research Methodology', doctoral students will consolidate their knowledge, skills and social competences regarding the set of rules, procedures and techniques used in the scientific research process applied in the scientific discipline of medical sciences. These include planning, conducting and analysing research with the aim of obtaining reliable and objective results. A key aspect in achieving this goal will be the selection of appropriate research methods that will allow for an adequate solution to the research problem and confirmation or refutation of the hypotheses. The doctoral student will acquire knowledge about organised research activities focusing on the generation of knowledge and its practical application.				
<b>COURSE LEARNING OUTCOMES AND METHODS OF EVALUATING LEARNING OUTCOMES</b>				
Learning outcome	The description of the learning outcome defined for the course	Relation to the degree programme outcomes (symbol)	Learning Format (Lectures, classes,...)	Method of assessment of learning outcomes (e.g. test, oral exam, written exam, project,...)
<b>Knowledge (no.)</b>	knows and understands, has knowledge			
<b>P8S_WG/3</b>	Knows, understands and uses specialist terminology used in the national and international scientific and professional environment in the scientific discipline of medical sciences in which scientific research is planned.	<b>P8S_WG</b>	Conversatory	project, discussion
<b>P8S_WG/4</b>	Has extensive knowledge of the applied research methodology in the discipline of medical science, using interdisciplinary research tools and techniques to obtain the most reliable and objective research results.	<b>P8S_WG</b>	Conversatory	written assignments, project
<b>P8S_WK/3</b>	Has extensive knowledge of the possibilities of transferring the results of their scientific activity to the economic and social spheres.	<b>P8S_WK</b>	Conversatory	written assignments, project
<b>Skills (no.)</b>	can			

<b>P8S_UW/1</b>	Is able to use interdisciplinary knowledge to identify and practically solve research problems encountered by: defining the objective, subject and research hypothesis, creating innovative research methods, techniques and tools, and drawing conclusions based on the research results obtained.			<b>P8S_UW</b>	Conversatory	project, discussion
<b>P8S_UK/1</b>	Actively participate in national and international scientific and professional communities, sharing the results of their research work.			<b>P8S_UK</b>	Conversatory	written assignments, project
<b>P8S_UO/1</b>	Through active participation in national and international research communities, participate in individual and team scientific projects, performing various roles.			<b>P8S_UO</b>	Conversatory	written assignments, project
<b>Social competence (no.)</b>	is ready to					
<b>P8S_KR1</b>	Strengthen and develop the ethos of research communities, including conducting scientific activities independently, taking into account the principles of intellectual property protection and the principles of public ownership of research results.			<b>P8S_KR</b>	Conversatory	project, discussion
Semester (no.)	Lectures	seminar	Conversatory / Lab classes	Internships	others	ECTS
I	-	-	-	-	30	3
II	-	-	-	-	30	3
total:	-	-	-	-	60	6
<b>METHODS OF INSTRUCTION</b>						
<ul style="list-style-type: none"> <li>- <i>TRADITIONAL SEMINAR;</i></li> <li>- <i>SEMINAR WITH MULTIMEDIA PRESENTATION;</i></li> <li>- <i>PROJECT;</i></li> <li>- <i>DISCUSSION.</i></li> </ul>						
<b>COURSE CONTENT</b>						
<b>Course content – to be supplemented with topics for two semesters</b>						
<b>Semester I:</b>						
<ul style="list-style-type: none"> <li>- Understanding the relationship between methodology and research subject as the key to designing a reliable study.</li> <li>- Methodology for the proper selection of scientific research.</li> <li>- Qualitative research: An approach to exploring ideas, opinions and experiences using non-numerical data, which allows for in-depth insight into phenomena</li> </ul>						
<b>Semester II:</b>						
<ul style="list-style-type: none"> <li>- Quantitative research methodology focusing on the collection and analysis of numerical data to test hypotheses, measure variables and identify patterns.</li> <li>- Use of structured data collection methods such as surveys, experiments and statistical analysis, allowing results to be generalised to a larger population.</li> </ul>						

## COURSE ASSESSMENT CRITERIA

The course is taught in semesters I and II. After semester I, the course ends with a ZO1 grade, and after semester II, it ends with an E2 examination. Classes are conducted in direct contact between the doctoral student and the supervisor or assistant supervisor.

In order to pass the course after semester I, a report on the completion of the task must be submitted.

In order to pass the course exam after semester II, at least 51% of the points from the written assignment must be obtained.

In order to obtain a positive grade, the following conversion table is used for the corresponding percentage of points obtained:

- up to 50% - unsatisfactory (the doctoral student is not making progress in scientific research, is not expanding their knowledge, is not studying the literature, is not participating in substantive discussions, is not fulfilling their scientific obligations);

- 51% - 60% - satisfactory (the doctoral student makes negligible progress in scientific research, expands their knowledge, studies basic literature, the discussion is limited to a narrow range of substantive knowledge, fulfils basic scientific duties);

- 61% - 70% - satisfactory plus (the doctoral student makes progress in scientific research, expands their knowledge, studies basic literature, participates substantively in discussions, fulfils their scientific duties);

- 71% - 80% - good (the doctoral student makes significant progress in scientific research, expands their knowledge, studies basic and supplementary literature, participates substantively in discussions, fulfils all scientific duties);

- 81% - 90% - good plus (the doctoral student makes significant progress in scientific research, systematically expands their knowledge, studies basic and supplementary literature, participates substantively in discussions, fulfils all scientific obligations);

- 91% - 100% - very good (the doctoral student makes significant progress in scientific research, systematically expands their knowledge, studies basic, supplementary and advanced literature, participates substantively in discussions, fulfils all scientific obligations);

### TOTAL PhD STUDENT WORKLOAD REQUIRED TO ACHIEVE THE INTENDED LEARNING OUTCOMES – NUMBER OF HOURS AND ECTS CREDITS

Activity	Number of hours
Scheduled course contact hours	<b>2 x 30 hrs. – 60 hrs.</b>
Other contact hours involving the teacher (consultation hours, examinations)	<b>4</b>
Non-contact hours – student`s own work (preparation for classes or examinations, project, etc.)	<b>116 hrs</b>
<b>Total number of hours</b>	<b>180 hrs.</b>
<b>Total number of ECTS credits</b>	<b>6 ECTS</b>

### INSTRUCTIONAL MATERIALS

Compulsory literature:	<p>Metodologiczne podstawy badań naukowych w medycynie z elementami ogólnej metodologii nauk</p> <p>Autor/Redaktor: Adam Jonkisz, Lesław Niebrój, Rok wydania 2010, Wydanie I ISBN 978-83-7509-136-6</p>
Complementary literature:	-----

\*(1 ECTS CREDIT CORRESPONDS TO 25 - 30 HOURS OF THE TOTAL WORKLOAD OF A DOCTORAL STUDENT, NEEDED TO ACHIEVE THE ESTABLISHED EFFECTS).

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Date and signature of the Course lecturer

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Approved by the Head of the Department or an authorised person