

A COURSE SYLLABUS – DOCTORAL SCHOOL
REGARDING THE QUALIFICATION CYCLE FROM 2021 TO 2025

GENERAL INFORMATION ABOUT COURSE				
Course title	Methodology of scientific research			
Name of the unit running the course	Doctoral School at University of Rzeszów			
Type of course (<i>obligatory, optional</i>)	Obligatory			
Year and semester of studies	Year I, winter semester			
Discipline	Education			
Language of Course	Polish			
Name of Course coordinator	Dr hab. Ryszard Pęczkowski, prof. UR			
Name of Course lecturer	Dr hab. Ryszard Pęczkowski, prof. UR			
Prerequisites	Knowledge of the basic issues of research methodology resulting from completion of 1st and 2nd degree studies - diagnosis in the course of classes			
BRIEF DESCRIPTION OF COURSE (100-200 words)				
<p>The methodology of scientific research is the basis of doctoral studies, which will directly determine the value of the empirical research undertaken. The classes will essentially concern the basic issues of research design and implementation, both in the field of quantitative and qualitative research. In particular, we will focus on the analysis of the structure of the research and its detailed characteristics, with particular emphasis on the ability to define the subject of research, the objectives of their implementation, formulate research issues, define variables and indicators, select research methods, techniques and tools, develop the collected empirical material along with the ability to use statistical methods in quantitative analysis, as well as the methods of presenting the results along with their interpretation.</p>				
COURSE LEARNING OUTCOMES AND METHODS OF EVALUATING LEARNING OUTCOMES				
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,...)
(no.)	Knowledge – student knows and understands:			
1.	Global achievements, covering theoretical foundations - to the extent enabling a revision of the existing paradigms. Also - general issues and selected specific issues - appropriate for a scientific or artistic discipline	P8S-WG/1	Lecture/seminar	Project
2.	Main development trends in scientific or artistic disciplines in which education takes place	P8S-WG/2	Lecture/ seminar	project
3.	Scientific research methodology	P8S-WG/3	Lecture/ seminar	Project

4.	Principles of disseminating the results of scientific activity, also in the open access mode	P8S-WG/4	Lecture/ seminar	project		
(no.)	Skills – student can:					
1.	Use knowledge from various fields of science or art for creative identification and innovative solving of complex problems or performing research tasks, in particular: - define the purpose and subject of research, formulate a research hypothesis, - develop methods, techniques and research tools and use them creatively, - make conclusions on the basis of scientific research	P8S-UW/1	Lecture/ seminar	Project		
2.	Plan and implement individual and team research projects, also in an international environment	P8S-UO	Lecture/ seminar	Project		
(no.)	Social competence – student is ready to:					
1.	Recognize the importance of knowledge in solving cognitive and practical problems	P8S-KK/3	Lecture/ seminar	Project		
2.	Fulfilling the social responsibilities of researchers and creators	P8S-KO/1	Lecture/ seminar	Project		
LEARNING FORMAT – NUMBER OF HOURS						
Semester (no.)	Lectures	Seminars	Lab classes	Internships	others	ECTS
I	10	20	—	—	—	0
METHODS OF INSTRUCTION						
Lecture supported by multimedia presentations. Practical exercises in the form of discussions						
COURSE CONTENT						
<p>1. Lectures/ Seminars:</p> <ul style="list-style-type: none"> • Scientific research methodology - the essence of scientific cognition, scientific research paradigms; legal and ethical aspects of conducting research - 3 hours • Research models in education sciences. Strategies for quantitative and qualitative research - 3 hours • Structure of the research process in quantitative and qualitative research - 4 hours. 						

2. Seminars / Lab classes/ others:

- Analysis of the structure of quantitative research - formulation of research goals, research issues, hypotheses, variables and indicators in quantitative research - 4 hours.
- Methods, techniques and tools, principles of selection, verification and standardization - 4 hours.
- Description and explanation of research results, interpretation, dependency analysis with the use of statistical tools - 4 hours.
- Qualitative research - the structure of narrative, biographical, ethnographic, phenomenological research, case study - 4 hours.
- Methods and techniques of qualitative research - 4 hours

COURSE ASSESSMENT CRITERIA

Positive test grade:

32 – 30 points – very good (5,0)

29 – 27 points – plus good (4,5)

26 – 24 points – good (4,0)

23 – 21 points – plus sufficient (3,5)

20 – 18 points – sufficient (3,0)

17 0 points – insufficient (2,0)

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	30
Other contact hours involving the teacher (consultation hours, examinations)	
Non-contact hours – student's own work (preparation for classes or examinations, project, etc.)	
Total number of hours	30
Total number of ECTS credits	0

INSTRUCTIONAL MATERIALS

Compulsory literature:

1. Frankfort-Nachmias Ch. Nachmias D. Metody badawcze w naukach społecznych. Poznań 2001.
2. Łobocki M. Metody i techniki badań pedagogicznych. Kraków 2011
3. Łobocki M. Wprowadzenie do metodologii badań pedagogicznych. Kraków 2010.
4. Muszyński H. Metodologiczne vademecum badacza pedagoga. Poznań 2018.

	<ol style="list-style-type: none"> 5. Palka S. (red.) Podstawy metodologii badań w pedagogice. Gdańsk 2009. 6. Pilch T. Bauman T (red.); Zasady badań pedagogicznych. Strategie ilościowe i jakościowe. Warszawa 2001. 7. Rubacha K., Metodologia badań nad edukacją. Warszawa 2008
Complementary literature:	<ol style="list-style-type: none"> 1. Babbie E., Podstawy badań społecznych. Warszawa 2013. 2. Brzeziński J. Metodologia badań psychologicznych. Poznań 2001. 3. Konarzewski K., Jak uprawiać badania oświatowe. Metodologia praktyczna. Warszawa 2000.