

**SYLLABUS – DOCTORAL SCHOOL  
CYCLE OF EDUCATION 2022 TO 2026**

BASIC INFORMATION CONCERNING THIS SUBJECT				
Subject title		DOCTORAL SEMINAR		
Name of the unit realizing the subject		Doctoral School in University of Rzeszów		
Subject type (compulsory, optional)		Compulsory		
Year/Semester		Year I/semester I, Year I/semester II, Year II/semester III, Year II/semester IV, Year III/semester V, Year III/semester VI, Year IV/semester VII		
Discipline		Medical sciences		
Language of lecture		Polish/English		
Name and surname of the course coordinator		Prof. Adam Reich, MD, PhD		
Name and surname of the course instructor		Prof. Adam Reich, MD, PhD		
Prerequisites		Completed higher education or advanced education at the higher education level. Knowledge of English at the B2 CEFR level, with a focus on specialised vocabulary.		
ABSTRACT OF THE SUBJECT (synthetic description of the content and objectives of the subject; 100-200 words)				
<p>The aim of the doctoral seminar is for doctoral students to plan and conduct a detailed analysis of a research project, which will then form the basis for the preparation of a doctoral dissertation on the basis of which the doctoral student will apply for a doctoral degree in medical sciences and health sciences, in the scientific discipline of medical sciences. As part of the course, doctoral students will acquire knowledge, skills and social competences in the following areas:</p> <ol style="list-style-type: none"><li>1. Preparing a literature review in a subject area relevant to the planned research project.</li><li>2. Formulating a research hypothesis, on the basis of which a research project will be prepared.</li><li>3. Planning a research project aimed at verifying the assumed research hypothesis.</li><li>4. Basic statistical analyses, including determining the size of the research group necessary to reliably verify the research hypothesis.</li><li>5. Processing the research results, including preparing tabular summaries and graphical representations of the results.</li><li>6. Preparing a paper for publication describing the research results obtained in the course of experimental work.</li><li>7. Preparing and submitting a doctoral dissertation, including the necessary documentation.</li></ol>				
METHODS OF VERIFICATION OF LEARNING OUTCOMES				
Symbol of effect	Expected learning outcomes efekty	Reference to learning outcomes for qualifications at PRK level 8 (symbol)	Form of didactic classes	Verification methods (e.g., colloquium, oral exam, written exam, project, etc.)
Knowledge No.	Knows and understands			
1.	He has extensive theoretical knowledge, supported by practical knowledge in the field of skin diseases, related to the topic of his doctoral thesis, and is familiar with the conceptual framework used in medical sciences, with a focus on the specialisation of dermatology, and is familiar with the latest discoveries and scientific achievements, including global ones, in the field of research interests in medical sciences and related disciplines	P8S_WG1, P8S_WG3	Seminar	Discussion,

	to a degree that allows for the verification of presented views on dermatological diseases and their consequences.					
2	Knows the role and understands the need for international cooperation in conducting scientific research and analysing the results obtained in the field of dermatological diseases.	P8S_WG2	Seminar	Discussion,		
Skills No.	Is able to					
1	Identify and solve research problems and take innovative actions to create further scientific achievements in the field of dermatology, be able to classify scientific publications and scientific journals, as well as scientific achievements according to the accepted rules applicable in the field of medical sciences.	P8S_UW2	Seminar	Discussion, publication		
2	Use meta-analyses in the research process by planning and conducting scientific research based on reliable research methods and techniques, as well as critically evaluate the obtained research results.	P8S_UW1	Seminar	Discussion, publication		
3	Prepare and deliver a multimedia presentation on the implementation of research and lead a discussion on the presentation in an international scientific and professional environment, using a foreign language at B2 CEFR level. Be able to establish and undertake scientific cooperation in international research teams, taking on various roles within them.	P8S_UK6	Seminar	Discussion, Presentation, publication		
4	Critically evaluate scientific research results, available expert analyses and other research and scientific works, and assess their contribution to the development and dissemination of medical knowledge.	P8S_UW3	Seminar	Discussion, Oral presentation		
Social competence No.	Is ready to					
1	He is ready to make critical judgements concerning scientific achievements in medical sciences and related disciplines and compare them with global achievements.	P8S_KK1	Seminar	Discussion, assessment		
2	Thanks to his knowledge, he is prepared to solve cognitive and practical problems.	P8S_KK3	Seminar	Discussion, publication		
FORMS OF TEACHING CLASSES, HOURS AND CREDITS <sub>1</sub>						
Semester No.	Lecture/Seminar	Exercise	Laboratory	Practical	Other	Number of point ECTS
I	15	-	-	-	-	2
II	15	-	-	-	-	2

III	15	-	-	-	-	2
IV	15	-	-	-	-	2
V	15	-	-	-	-	2
VI	15	-	-	-	-	2
VII	15	-	-	-	-	2
<b>total:</b>	<b>105 hrs.</b>					<b>14 ECTS</b>

#### TEACHING METHODS

Contact with the doctoral student during classes, assessment of activity during classes, assessment of involvement in substantive discussion.

#### PROGRAM CONTENT

##### Curriculum content covered in the course (semesters I to VII)

1. Dermatology as a medical specialty combining various fields of medicine.
2. Concept of the doctoral thesis topic.
3. Finalising the doctoral thesis topic.
4. Formulating the research problem, proposing hypotheses and defining the subject of scientific research.
5. Medical experiments and other forms of scientific research in medicine.
6. Selection of research methods, techniques and tools.
7. Preparation and submission of documentation to the Bioethics Committee.
8. Legal regulations concerning the conduct of medical research.
9. Analysis of pilot study results.
10. Analysis of the selection of research methods, techniques and tools based on the results of pilot studies.
11. Conducting research.
12. Compiling research results.
13. Preparing a doctoral dissertation.

#### CONDITIONS FOR COMPLETING THE SUBJECT (EVALUATION CRITERIA)

##### Oral examination.

The requirements for passing the course include designing and conducting a medical experiment or other equivalent research work, compiling the research results, preparing a conference presentation and a publication for print, as well as demonstrating highly specialised knowledge relevant to research work.

The applicable grading scale is: 2.0, 3.0, 3.5, 4.0, 4.5, 5.0.

Detailed assessment of knowledge:

5.0 – demonstrates knowledge of each of the educational contents at a level of 90%-100%

4.5 – demonstrates knowledge of each of the educational contents at a level of 84%-89%

4.0 – demonstrates knowledge of each of the educational contents at a level of 77%-83%

3.5 – demonstrates knowledge of each of the educational contents at a level of 70%-76%

3.0 – demonstrates knowledge of each of the educational contents at a level of 60%-69%

2.0 – demonstrates knowledge of each of the educational contents below 60%

#### TOTAL STUDENT WORKLOAD REQUIRED TO ACHIEVE THE DESIRED RESULT IN HOURS AND ECTS CREDITS

Activity	The average number of hours to complete the activity
Hours carried out in direct contact resulting from the study plan	<b>7 x 15 – 105 hrs.</b>
Others with the participation of the teacher (participation in consultations, exam)	<b>0</b>

Hours carried out independently by the PhD student (preparation for classes, exam, writing a paper, etc.)		315 hrs.
<b>TOTAL HOURS</b>		420 hrs.
<b>TOTAL NUMBER OF ECTS CREDITS*</b>		14
<b>LITERATURE</b>		
Primary literature:	Literature related to the topic of the doctoral thesis (separate for each doctoral student), Medical databases (PubMed, Scopus, Web of Science).	
Supplementary literature:	-	

\*(1 ECTS POINT CORRESPONDS TO 25–30 HOURS OF TOTAL WORK BY THE DOCTORAL STUDENT NECESSARY TO ACHIEVE THE INTENDED RESULTS)

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Date and signature of the course lecturer

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Approval of the Head of the Unit or authorised person