## SYLLABUS – DOCTORAL SCHOOL CYCLE OF EDUCATION 2023/2024 TO 2026/2027

BASIC INFORMATION	ON 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- IV, semester: I - 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 and confirmed scientific activity.
	Knowledge of English at the B2 CEFR level, with a focus on
	specialist vocabulary.

#### **ABSTRACT OF THE SUBJECT**

### (synthetic description of the content and objectives of the subject; 100-200 words)

Subject The doctoral seminar aims to develop the doctoral student's ability to formulate research hypotheses, identify and express scientific problems. The specific objective is for the doctoral student to acquire the ability to conduct scientific discussions, improve their reasoning skills in the field of medical and health sciences, in the discipline of medical sciences, developing the ability to communicate with the scientific and professional world, acquiring the knowledge, skills and social competences necessary to properly analyse the results of their own research and, on this basis, prepare a doctoral dissertation.

The doctoral seminar includes individual consultations with doctoral students on the planning and conduct of scientific research, analysis of literature in the context of planned and ongoing scientific research, and the creation of the scientific text of the doctoral dissertation. Participation in the doctoral seminar prepares doctoral students to conduct independent scientific research and publish their results.

	METHODS OF VERIFICATION OF	LEARNING OUT	COMES	
Symbol of effect  Knowledge	Expected learning outcomes efekty  Knows and understands	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.)
No.				
P8S_WG1	He has extensive theoretical knowledge backed by practical experience and is familiar with current scientific achievements, including global ones, in the field of medical sciences, particularly in the field of skin diseases and their treatment, as well as general issues in related disciplines connected with the research being conducted, and has knowledge of its significance and place in the scientific system.		Seminar	oral presentation, discussion
P8S_WG2	They are familiar with the directions of scientific research and the latest discoveries in the diagnosis and treatment of dermatological diseases worldwide.	P8S_WG	Seminar	oral presentation, discussion

P8S_WG <sub>3</sub> Skills No.	They know, understand and communicate using the professional terminology used in the scientific and professional community in the field of medical science and health science in their native and foreign languages.  Is able to			oral presentation, discussion
P8S_UW1	Based on their interdisciplinary knowledge, particularly medical knowledge, they are able to identify and solve scientific research problems, define objectives, formulate hypotheses and research topics, improve research techniques, methods and tools, and draw conclusions based on the results of scientific research.		Seminar	oral presentation, discussion
P8S_UW2	Select and use available scientific literature to diagnose and solve research problems and innovative activities in scientific work in the field of medical sciences in the field of dermatology, and apply the appropriate tools to create new elements of scientific output.		Seminar	oral presentation, discussion
P8S_UW <sub>3</sub>	Use available knowledge to analyse and evaluate the results of scientific research, expert publications and other studies in the field of dermatological diseases, formulating opinions on this basis, including critical judgements.	P8S_UW	Seminar	oral presentation, discussion
P8S_UK6	Be able to speak in public to present the results of their own scientific research in the field of dermatological diseases and actively participate in discourse on scientific and professional topics in an international environment, using a foreign language at level B2 of the Common European Framework of Reference for Languages.	P8S_UK	Seminar	oral presentation, discussion
Social competence No.	Is ready to			
P8S_KK1	He is ready to undertake a critical assessment of achievements within his chosen scientific discipline: medical science focused on skin diseases, and to critically assess the contribution of his own research activities to the development of this discipline.	P8S_KK	Seminar	oral presentation, discussion
P8S_KK <sub>3</sub>	Thanks to his knowledge, he is ready to express his objective judgement and solve cognitive and practical problems in the broadly understood field of dermatology.	P8S_KK	Seminar	oral presentation, discussion

FORMS OF TEACHING CLASSES, HOURS AND CREDITS1						
Semester No.	Lecture/Seminar	Exercise	Laboratory	Practical	Other	Number of point ECTS
I - IV	15	-	-	-	7 x 15 hrs. – 105 hrs.	14

#### **TEACHING METHODS**

- academic discussion,
- study of academic literature and medical databases,
- multimedia presentation,
- preparation and presentation of research objectives, research methods, research results,
- final assignments,
- progress in the preparation of a doctoral dissertation.

#### **PROGRAM CONTENT**

Curriculum content covered during semesters: I to VII.

The seminar covers issues related to the implementation of research topics in the field of medical sciences.

- 1. Analysis of available scientific literature and medical databases in the area of research interest.
- 2. Determination of the topic of the doctoral dissertation, subject, objectives of own research and formulation of research hypotheses.
- 3. Research methodology (research methods, techniques and tools).
- 4. Substantive preparation for the practical conduct of scientific research.
- 5. Conducting a pilot study. Discussion of the results of the pilot study.
- 6. Conducting the actual research.
- 7. Compiling the research results.
- 8. Interpretation of the research results and formulation of final conclusions.
- 9. Verification of research hypotheses.
- 10. Detailed analysis based on the collected data.
- 11. Formulation of conclusions resulting from the dissertation.
- 12. Citation and editing of literature.
- 13. Evaluation of the doctoral dissertation in an anti-plagiarism system.

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

The assessment covers the doctoral student's continuous work in each semester and academic year in the following areas: conducting research, expanding knowledge, skills and social competences, studying literature, commitment and progress in preparing the doctoral dissertation.

Possible semester grades are: 2.0, 3.0, 3.5, 4.0, 4.5, 5.0.

In order to obtain a positive grade, a conversion factor is applied 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 duties);

✓ 91% - 100% - very good (the doctoral student makes significant progress in scientific research, systematically expands their knowledge, studies basic and supplementary literature, as well as literature beyond the required scope, participates in discussions in a substantive manner, fulfils all scientific obligations);

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

	CKEDIIS			
Activity		The average number of hours to complete the activity		
Hours carried ou plan	t in direct contact resulting from the study	7 x 15 – 105 hrs.		
Others with the p	participation of the teacher	10		
(participation in consultations, exam)				
Hours carried out	independently by the PhD student	305 hrs.		
(preparation for o	classes, exam, writing a paper, etc.)			
TOTAL HOURS				
		420 hrs.		
TOTAL NUMBER OF ECTS CREDITS*		14		
	LITERATURE			
Primary	Literature related to the topic of the doctoral thesis (separate for each doctoral student),			
literature:	Medical databases (PubMed, Scopus, Web of Science).			
Supplementary	-			
literature:				

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

Date and signature of the course lecturer
Approval of the Head of the Unit or authorised person