

A COURSE SYLLABUS – DOCTORAL SCHOOL
REGARDING THE QUALIFICATION CYCLE FROM 2024/2025 TO 2028/2029

GENERAL INFORMATION ABOUT COURSE				
Course title	DOCTORAL SEMINAR			
Name of the unit running the course	Doctoral School at the University of Rzeszow			
Type of course (<i>obligatory, optional</i>)	Obligatory subject			
Year and semester of studies	Year I -IV, semester: I - VII			
Discipline	Medical sciences (anesthesiology and intensive care)			
Language of Course	Polish/English language			
Name of Course coordinator	Dr. med. Renata Zajączkowska, prof. UR			
Name of Course lecturer	Dr. n. med. Renata Zajączkowska, prof. UR			
Prerequisites	No			
BRIEF DESCRIPTION OF COURSE (100-200 words)				
<p>The purpose of the seminars is to prepare the Doctoral Student to plan and carry out a research project, which will then be the basis for the preparation of a dissertation, based on which the Doctoral Student will apply for the degree of Doctor of Medical Sciences in the field of medical and health sciences.</p> <p>As part of the course, the Doctoral Student will acquire knowledge and skills in:</p> <ol style="list-style-type: none"> 1. preparing a literature review in the subject area coinciding with the planned research project. 2. Establishing a research hypothesis, on the basis of which a research project will be prepared. 3. Planning a research project to verify the assumed research hypothesis. 4. basic statistical analyses, including determining the size of the research group necessary to reliably verify the research hypothesis. 5. development of the obtained research results, including preparation of tabular statements and graphical presentation of the results. 6. prepare for publication a paper describing the results of the research obtained in the course of the research work. 7. preparation and submission of the dissertation, including the necessary documentation in this regard. 				
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,...)
Knowledge (no.)	knows and understands, has knowledge			
1.	Has a broad theoretical knowledge and knows the current scientific achievements in the field of medical and health sciences, discipline: medical sciences, as well as general issues in related disciplines;	P8S_WG1	seminar	oral statement, discussion
2.	Is familiar with the directions of scientific research and the latest discoveries, including those of global scope, in the practiced discipline of medical science;	P8S_WG2	seminar	oral statement, discussion
3.	Knows, understands and has knowledge of the professional	P8S_WG3	seminar	oral statement,

	terminology used in the field of medical and health sciences in the native and foreign languages;			discussion
Skills (no.)	can			
1.	Based on his knowledge in the discipline of medical and health sciences, he is able to identify and solve the problem of scientific research, define the purpose, formulate the hypothesis and object of scientific research, refine research techniques, methods and tools, and make conclusions based on the results of scientific research;	P8S_UW1	seminar	oral statement, discussion
2.	Select and use the scientific literature to diagnose and solve research problems and innovative activities in their research work, and apply the appropriate workshop to create new elements of scientific output in the discipline of medical science;	P8S_UW2	seminar	oral statement, discussion
3.	Use their knowledge to analyze and evaluate the results of scientific research, forming an opinion on this basis, including critical judgments.	P8S_UW3	seminar	oral statement, discussion
4.	Competently cite other authors in articles published and prepared for publication in peer-reviewed scientific journals, in peer-reviewed materials from international scientific conferences, prior to the preparation of the dissertation;	P8S_UK6	seminar	oral statement, discussion
Social competence (no.)	is ready to			
1.	Critically evaluate the achievements within the chosen scientific discipline: medical science and the contribution of the results of one's own research activity to the development of the studied discipline.	P8S_KK1	seminar	oral statement, discussion
2.	Solve cognitive and practical problems with the help of their knowledge.	P8S_KK3	seminar	oral statement, discussion

LEARNING FORMAT – NUMBER OF HOURS						
Semester (no.)	Lectures	Seminars	Lab classes	Internships	others	ECTS
I - VII	-	-	-	-	105	14

METHODS OF INSTRUCTION

DOCTORAL SEMINAR: ORAL STATEMENT, DISCUSSION.

DOCTORAL STUDENT'S OWN WORK: ANALYZING THE LITERATURE, CONDUCTING RESEARCH, WRITING A DOCTORAL THESIS, PREPARING A MULTIMEDIA PRESENTATION.

COURSE CONTENT

Semester I

Preliminary analysis of the prepared literature.

Selection of an area of research **interest** based on the analysis of the literature.

Semester II

Determination of the topic of the dissertation.

Determination of the research objective and research hypotheses.

Agreeing on the research methodology.

Drafting a full proposal to the bioethics committee.

Semester III

Conducting a pilot study. Discussing the results of the pilot study.

Semester IV

Conducting the study.

Semester V

Conducting the research - follow-up. Preliminary discussion of research results.

Preparation of the introductory chapter for the dissertation.

Semester VI

Preparation of a chapter describing the purpose of the dissertation and research hypotheses.

Preparation of a chapter describing the studied material and research methods.

Preparation and discussion of the statistical analysis of the obtained research results.

Preparation of a chapter on discussion of the results.

Semester VII

Verification of research hypotheses.

Preparation of a detailed discussion based on the collected literature.

Formulation of conclusions resulting from the work.

Proper citation and editing of the literature.

Evaluation of the dissertation in the anti-plagiarism system.

Completion and formatting according to the accepted principles of the dissertation.

Preparation of an abbreviated multimedia presentation of the dissertation.

COURSE ASSESSMENT CRITERIA

The prerequisite for passing the course is the design and conduct of a research paper, the development of the obtained research results, the preparation of a dissertation and a conference presentation, as well as the demonstration of highly specialized knowledge of the issues related to the research paper.

Detailed knowledge assessment:

The continuous work of the Doctoral Student in each semester and academic year is evaluated in terms of: implementation of research, expansion of knowledge, study of literature, involvement and progress in the preparation of the dissertation. Possible semester grades are: 2.0, 3.0, 3.5, 4.0, 4.5, 5.0.

To obtain a passing grade, a conversion factor is applied for the corresponding percentage of points obtained:

- up to 50% - insufficient: the doctoral student does not make progress in scientific research, does not expand his

knowledge, does not study the literature, does not participate in substantive discussion, does not fulfill his scientific duties;

- 51% - 60% - sufficient: the doctoral student makes negligible progress in scientific research, expands knowledge, studies primary literature, the discussion held is limited to a narrow range of substantive knowledge, fulfills basic scientific duties;
- 61% - 70% - sufficient plus: the doctoral student makes progress in scientific research, expands knowledge, studies basic literature, substantively participates in discussion, fulfills scientific duties;
- 71% - 80% - good: the doctoral student makes significant progress in scientific research, expands knowledge, studies primary and supplementary literature, substantively participates in discussions, fulfills all scientific duties;
- 81% - 90% - good plus: the doctoral student makes significant progress in scientific research, systematically expands knowledge, studies primary and supplementary literature, substantively participates in discussion, fulfills all scientific duties;
- 91% - 100% - very good: the doctoral student makes significant progress in scientific research, systematically expands knowledge, studies basic, complementary and beyond the obligatory literature, substantively participates in discussions, fulfills all scientific duties;

**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	7 x 15 hrs - 105 hrs.
Other contact hours involving the teacher (consultation hours, examinations)	6
Non-contact hours – student’s own work (preparation for classes or examinations, project, etc.)	309
Total number of hours	420 hrs.
Total number of ECTS credits	14

INSTRUCTIONAL MATERIALS

Compulsory literature:	1. ANESTHESIOLOGY AND INTENSIVE CARE. RADOŚŁAW OWCZUK. PZWŁ 2021. 2. ADULT INTENSIVE CARE IN CLINICAL PRACTICE. ZBIGNIEW RYBICKI. MAKMED PUBLISHING HOUSE 2022. 3. INTENSIVE CARE IN SEVERE TRAUMA. WALDEMAR MACHALA . MAKMED PUBLISHING HOUSE 2015.
Complementary literature:	1. TEXTBOOK OF CRITICAL CARE 8TH EDITION. J.L.VINCENT, F.A. MOORE, R. BELLOMO, J.J.MARINI. ELSEVIER 2024. 2. CRITICAL CARE MEDICINE AT A GLANCE 4TH EDITION. R.M. LEACH. JOHN WILEY AND SONS LTD. 2023.

*(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