

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

GENERAL INFORMATION ABOUT COURSE				
Course title	DOCTORAL DISSERTATION			
Name of the unit running the course	Doctoral School at University of Rzeszów			
Type of course (<i>obligatory, optional</i>)	Obligatory subject			
Year and semester of studies	Year I -IV, semester: I - VIII			
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 aim of the course 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 award of the degree of Doctor of Medical Sciences in the scientific discipline of medical sciences.</p> <p>As part of the course, the Doctoral Student will acquire knowledge and , skills and social competencies 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 the 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. elaboration of the obtained research results, including preparation of tabular statements and graphical presentation of the results. 6. preparation for printing a paper describing the results of the research obtained in the course of the research work. 7 Prepare and submit a 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 of the studied scientific discipline: medical sciences, as well as general issues of related disciplines; knows the current scientific achievements, including those of the world, has knowledge of the place of the studied field of medical and health sciences and their importance in the system of	P8S_WG1	*laboratory/ conversations	report

	science in confrontation with other fields.			
2.	He knows the directions of scientific research and the latest discoveries, including those of global scope, in the scientific discipline studied.	P8S_WG2	*laboratory/ conversations	report
3.	Knows and understands the specialized terminology used in the studied discipline of medical science and in related disciplines, including in a foreign language.	P8S_WG3	*laboratory/ conversations	report
4.	He knows the issues in the methodology of conducting scientific research in the scientific discipline: medical sciences and related disciplines, knows the principles of planning and implementing scientific research, using interdisciplinary research techniques and tools.	P8S_WG4	*laboratory/ conversations	report
Skills (no.)	can			
1.	Based on his/her knowledge, he/she is able to identify and solve a research problem, define the purpose of research, formulate a hypothesis and the subject of scientific research, develop research techniques, methods and tools, and make conclusions based on the results of scientific research.	P8S_UW1	*laboratory/ conversations	report
2.	Select and use scientific literature to properly diagnose and solve research problems and innovative activities in conjunction with with the scientific work being carried out, and apply the appropriate workshop to create new elements of scientific output.	P8S_UW2	*laboratory/ conversations	report
3.	Independently acquire knowledge, expand analytical skills, and stimulate critical sensitivity to recognize dilemmas in conducting scientific research and fulfilling the role of a university teacher.	P8S_UW3	*laboratory/ conversations	report
Social competence (no.)	is ready to			
1.	Critically evaluate achievements within the chosen scientific discipline of medical science and related disciplines	P8S_KK1	*laboratory/ conversations	report

LEARNING FORMAT – NUMBER OF HOURS						
Semester (no.)	Lectures	Seminars	Lab classes/conv.	Internships	others	ECTS
I - VIII	-	-	8 x 30 hrs. 240 hrs.	-	-	24

METHODS OF INSTRUCTION

CONTACT WITH A DOCTORAL STUDENT DURING CLASSES, EVALUATION OF ACTIVITY DURING CLASSES, EVALUATION OF ENGAGEMENT IN DISCUSSION

- CONVERSATIONS IN THE TRADITIONAL FORM;
- CLASSES WITH MULTIMEDIA PRESENTATION;
- PROJECTS;
- DISCUSSION;
- INTERPRETATION OF SOURCE TEXTS;
- PERFORMING EXPERIMENTS AND EXPERIMENTS;
- CONDUCTING RESEARCH.

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 an introductory chapter for the dissertation.

Semester VI

Preparation of a chapter describing the purpose of the work 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.

Semester VIII

Completing and formatting according to the accepted rules 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 doctoral student's continuous work 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	8 x 30 hrs - 240 hrs.
Other contact hours involving the teacher (consultation hours, examinations)	10
Non-contact hours – student's own work (preparation for classes or examinations, project, etc.)	470
Total number of hours	720
Total number of ECTS credits	24

INSTRUCTIONAL MATERIALS

Compulsory literature:	<ol style="list-style-type: none"> 1. ANESTHESIOLOGY AND INTENSIVE CARE. RADOSŁAW OWCZUK. PZWL 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.
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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.
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*(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