

**Resolution No. 272/2019
of February 28, 2019
of the Senate of the Medical University of Lodz**

**on the program of studies at the Doctoral School run by
the Medical University of Lodz**

Pursuant to Article 28(1)(12) of the Act of July 20, 2018 – Law on Higher Education and Science (Journal of Laws, Item 1668, as amended) in conjunction with Article 291 of the Act of July 3, 2018 – Implementing provisions – Law on Higher Education and Science (Journal of Laws, Item 1669), and pursuant to § 34 Item 5 of the Statutes of the Medical University of Lodz of September 27, 2011, as amended, the Senate of the Medical University of Lodz hereby adopts the following resolution:

§ 1

The program of studies at the Doctoral School run by the Medical University of in Lodz is established, constituting an annex to the Resolution.

§ 2

The Resolution becomes effective upon being adopted.

RECTOR: *Prof. Radzisław Kordek, MD, PhD*

cc:

- organizational units according to the distribution list
- Intranet/Public Information Bulletin

PROGRAM OF STUDIES AT THE DOCTORAL SCHOOL RUN BY THE MEDICAL UNIVERSITY OF LODZ

I. General outline of the program of studies

The Doctoral School run by the Medical University of Lodz is an organized form of education for doctoral students in the following disciplines: pharmacology and pharmacy, medical sciences and health sciences.

Studies at the Doctoral School:

- 1) last eight semesters and ends with submission of a doctoral dissertation;
- 2) ensures preparation for obtaining the degree of *doktor* (doctoral degree) in medical sciences and health sciences, in the following scientific disciplines: pharmacology and pharmacy, medical sciences and health sciences;
- 3) is provided in compliance with the program of studies and the individual research plan.

Implementation of the program of studies at the Doctoral School results in achieving learning outcomes at level 8 of the Polish Qualifications Framework specified in the Act of December 22, 2015 on Integrated Qualifications System (consolidated text, Journal of Laws of 2018, Item 2153) and provisions issued under Article 7(3) thereof.

II. Relation of the program of studies with the mission and development strategy of the Medical University of Lodz

The program of studies at the Doctoral School complies with the mission of the Medical University of Lodz and was developed based on its key idea, i.e. ensuring an outstanding quality of conducted research studies, updating educational offer in response to the needs of the community, particularly patients and entities providing healthcare services, making a significant contribution to the development of the healthcare system by promoting modern prevention and treatment standards and establishing close cooperation with institutions that carry out public health tasks at the regional, national and international level.

The program of studies at the Doctoral School complies with the development strategy of the Medical University of Lodz for the years 2015-2020, including the objectives specified for the field of science and research as well as research and development activity, i.e. increasing the number and quality of research studies conducted by the University, as well as extending and improving implementation activities.

III. Main learning objectives

The main learning objective of studies at the Doctoral School is preparing and submitting a doctoral dissertation by the doctoral student and preparing them for obtaining the doctoral degree.

The main learning objectives at the Doctoral School also include:

- 1) preparing doctoral students for work involving teaching, research as well as research and development;
- 2) acquiring the skill of taking advantage of the world's scientific achievements, identifying and solving research problems, planning and conducting research studies as well as analyzing their results for the purpose of patents, publications or presentations at scientific conventions;
- 3) obtaining high research competencies and scientific independence by doctoral students;
- 4) preparing doctoral students for autonomous planning of their own scientific development and facing professional and public challenges, including the ethical aspect and responsibility, in compliance with the European Charter for Researchers;
- 5) preparing doctoral students for exchange of research experience and ideas, also in an international community.

The Doctoral School supports mobility of students and establishing international relations by giving doctoral students an opportunity for participation in international exchange programs and international conferences.

IV. Preliminary requirements – candidate profile

Admission to the Doctoral School may be applied for by a candidate holding a professional title of *magister*, *magister inżynier* or an equivalent title, being a graduate of the fields of studies such as in particular medical sciences, dentistry, public health, biology, biotechnology or pharmacy.

In exceptional cases, justified by top quality scientific achievements, the Doctoral School may admit a graduate of a first-cycle program or a student who completed the third year of a unified long-cycle program, including a student who is a beneficiary of the “Diamentowy Grant” (*Diamond Grant*) program. Scientific achievements of each candidate are assessed by the Recruitment Committee which may ask a relevant scientific discipline council or the Scientific Council of the Medical University of Lodz for their opinion.

A candidate applying for admission to the Doctoral School should have competences and scientific achievements that allow for taking up education at level 8 of the Polish Qualifications Framework in the following scientific disciplines: pharmacology and pharmacy, medical sciences, health sciences.

V. Procedure of recruitment to the Doctoral School

The procedure of recruitment to the Doctoral School is conducted by a contest, in accordance with the rules specified by the Senate of the Medical University of Lodz. The results of the contest are open to the public. Both candidates being Polish citizens and foreigners may apply for admission to the Doctoral School.

Limits of admissions to the Doctoral School, for specific scientific disciplines in which studies are offered, are set by the Rector based on applications for awarding places at the Doctoral School in each academic year filed by heads of the University research and teaching units and analysis of costs of education for doctoral students incurred by the University.

The recruitment procedure is conducted by the Recruitment Committee for the Doctoral School appointed by the Rector. The procedure of recruitment to the Doctoral School includes the following stages:

- 1) submission of documents required in the recruitment procedure by candidates;

- 2) verification of documents submitted by candidates;
- 3) qualification procedure;
- 4) entry into the register of doctoral students or issue of the administrative decision on refusal of admission to the Doctoral School.

In the qualification procedure, a candidate is awarded recruitment points for the following: results of exams in a modern foreign language and the major subject, the average grade obtained for the period of a first-cycle and second-cycle programs of studies or a unified long-cycle program of studies, participation in student exchange programs and scientific achievements. Candidates are qualified for admission to the Doctoral School based on ranking lists.

A candidate applying for admission to the Doctoral School is obliged to present an outline of a research project.

VI. Description of the intended learning outcomes

A description of the intended learning outcomes includes characteristics of the second level for qualifications at level 8 of the Polish Qualifications Framework, as specified in the Regulation of the Minister of Science and Higher Education of November 14, 2018 on the characteristics of the second level of learning outcomes for qualifications at levels 6-8 of the Polish Qualifications Framework (Journal of Laws of 2018, Item 2218). The learning outcomes refer to the following scientific disciplines: pharmacology and pharmacy, medical sciences, health sciences.

Key descriptive categories	Description component code	Characteristics of the second level of learning outcomes for qualifications at level 8 of the Polish Qualifications Framework
KNOWLEDGE (a person knows and understands):		
Scope and depth of understanding – completeness of the cognitive perspective and dependencies	P8S_WG	<ul style="list-style-type: none"> • to an extent allowing for a review of the existing paradigms - the world's achievements, including theoretical fundamentals and general issues as well as selected detailed issues related to a specific scientific discipline • main development trends of the scientific disciplines in which studies are offered • methodology of scientific research • rules of dissemination of research findings, also as open access resources
Context – conditions and effects	P8S_WK	<ul style="list-style-type: none"> • fundamental dilemmas of the contemporary civilization • economic, legal, ethical and other significant conditions of research activity • basic principles of transfer of knowledge to economic and social spheres and commercialization of research findings and related know-how

SKILLS (a person is able to):		
Applying knowledge in practice – problem solving and performed tasks	P8S_UW	<ul style="list-style-type: none"> • apply knowledge in different fields of science for creative identification, formulation and innovative solutions of complex problems or performance of various research tasks, in particular: <ul style="list-style-type: none"> - define the objective and subject of research studies, formulate a research hypothesis, - develop research methods, techniques and tools and apply them creatively, - draw conclusions based on research findings • make a critical analysis and assessment of research findings, expert activity and other creative studies and their contribution to the development of knowledge • transfer research findings to the economic and social spheres
Communication – interpreting and making statements, dissemination of knowledge in the scientific community and use of a foreign language	P8S_UK	<ul style="list-style-type: none"> • communicate on specialized topics to an extent ensuring active participation in an international scientific community • disseminate results of scientific activities, including in popular forms • initiate a debate • participate in a scientific discourse • use a foreign language at B2 level of the Common European Framework of Reference for Languages to an extent allowing for participation in an international scientific and professional community
Work organization – planning and teamwork	P8S_UO	<ul style="list-style-type: none"> • plan and perform individual and team research projects, also in an international community
Learning – planning one’s own development and development of others	P8S_UU	<ul style="list-style-type: none"> • independently plan and act for the purpose of one’s own development as well as inspire and organize development of others • plan courses or groups of courses and conduct them using modern methods and tools
SOCIAL COMPETENCE (a person is ready to):		
Evaluation – critical attitude	P8S_KK	<ul style="list-style-type: none"> • critically assess achievements in a specific scientific discipline • critically assess one’s own contribution to the development of a specific scientific discipline • recognize the significance of knowledge for solving cognitive and practical problems
Responsibility – fulfilling	P8S_KO	<ul style="list-style-type: none"> • fulfilling social responsibilities of researchers and

social tasks and acting for the public interest		<p>creators</p> <ul style="list-style-type: none"> • initiate activities for the public interest • think and act in an enterprising manner
Professional role – independence and development of the ethos	P8S_KR	<ul style="list-style-type: none"> • maintain and develop the ethos of scientific community, including: <ul style="list-style-type: none"> - conducting research activity in an independent way, - respect the principle of public property of research findings and the rules of intellectual property protection

VII. Verification of the learning outcomes

Following completion of a course in a subject specified in the program of studies, the learning outcomes achieved by doctoral students are verified in exams, credit tests or credit tests with grades. The form of obtaining credits is defined in the schedule of implementation of the program of studies. Doctoral students are informed about the procedure of holding an exam or awarding credit by an academic teacher before the commencement of the course cycle.

Exams and credit tests may have the form of written or oral tests verifying knowledge and skills; credit for courses may be awarded based on written assignments (essays) on a specific topic prepared by doctoral students, multimedia projects or presentations.

The learning outcomes achieved by the doctoral student are also verified by assessment of:

- 1) doctoral student's presentations given during an open doctoral seminar - an annual public review session involving presentation of research hypotheses, methods and research findings given in English; the doctoral student's presentation is assessed by the supervisor and the supervisor includes the result of the assessment in the doctoral student's annual report;
- 2) implementation of the individual research plan, including the schedule of preparation of the doctoral dissertation, conducted by the evaluation committee in the form of a mid-term assessment in the middle of the education period; the mid-term assessment shall end with a positive or negative result, and its result, with substantiation, is open to the public.

VIII. Schedule of implementation of the program of studies

The schedule of implementation of the program of studies at the Doctoral School defines:

- 1) subjects taught in obligatory and elective courses, including the number of hours;
- 2) number of hours of professional placement training;
- 3) location of compulsory and optional courses and professional placement training in particular semesters of studies;
- 4) forms of conducting classes and awarding credits for courses and professional placement training;
- 5) units conducting didactic classes.

Total number of hours prescribed in the schedule (Year 1-4, Semesters 1- 8):

- 1) classes with the participation of an academic teacher – 277 hours, including 272 hours of obligatory courses and 5 hours of elective courses;
- 2) professional placement training – 210 hours, including 30 hours in Year 1, and 60 hours in Years 2-4.

**Schedule of implementation of the program of studies at the Doctoral School
run by the Medical University of Lodz**

YEAR 1 (SEMESTERS 1 and 2)					
No.	Name of the course	Unit conducting the classes	Form of classes	Number of hours	Form of awarding credit for the course
1	MEDICAL INFORMATICS	Informatics and Medical Statistics Centre 90-647 Łódź pl. Hallera 1 Magdalena Bakalarz, MA, Monika Badowska-Wojdecka, MA	practical classes	15 hours	credit with a grade
2	PRINCIPLES OF CONDUCTING SCIENTIFIC RESEARCH AND PREPARATION OF SCIENTIFIC PUBLICATIONS	Department of Blood Coagulation Disorders 90-549 Łódź ul. Żeromskiego 113 Prof. Cezary Watała, MD, PhD – practical classes, Marcin Różalski, MD, PhD – lecture	lecture – 5 hours practical classes – 10 hours	15 hours	exam
3	LEGAL CONDITIONS OF CONDUCTING MEDICAL EXPERIMENTS	Department of Medical Law 90-131 Łódź ul. Lindleya 6 Prof. Rafal Kubiak	lecture – 5 hours	5 hours	credit with a grade
4	OCCUPATIONAL HEALTH AND SAFETY TRAINING	Department of Medical Law 90-131 Łódź ul. Lindleya 6 Julian Wójtowicz, MA	lecture – 2 hours. practical classes – 3 hours	5 hours	credit
5	MEDICAL STATISTICS	Department of Epidemiology and Biostatistics 90-752 Łódź ul. Żeligowskiego 7/9 Malgorzata Pikala, MD, PhD Monika Burzyńska, MD, PhD	practical classes	15 hours	credit with a grade
6	SCIENTIFIC INFORMATION	MUL Library 91-151 Łódź ul. Muszyńskiego 2 Witold Kozakiewicz, MSc	practical classes	25 hours	credit with a grade
7	FUNDAMENTALS OF DIDACTICS IN HIGHER EDUCATION - DIDACTIC COURSE	Department of Bioethics 90-131 Łódź ul. Lindleya 6 Joanna Turek, PhD	lecture – 6 hours practical classes – 9 hours	15 hours	credit with a grade
8	DOCTORAL SEMINAR – PUBLIC REVIEW SESSION	Head of the Doctoral School	seminar	10 hours	credit

9	ACQUISITION OF SOURCES OF FUNDING FOR SCIENTIFIC RESEARCH	Prof. Andrzej Bednarek, MD, PhD, Prof. Malgorzata Czyż, MD, PhD, Prof. Jakub Fichna, MD, PhD	lecture	2 hours	credit
10	PROFESSIONAL PLACEMENT TRAINING (conducting or co-participation in conducting of didactic classes for students)	didactic classes conducted by a unit	practical classes	30 hours	credit
	Summary of Year 1 (Semesters 1 and 2) - total number of hours of classes with the participation of an academic teacher (excluding professional placement training)			107 hours	
YEAR 2 (SEMESTERS 3 and 4)					
No.	Name of the course	Unit conducting the classes	Form of classes	Number of hours	Form of awarding credit for the course
1	MEDICAL AND PHARMACEUTICAL LAW	Department of Medical Law 90-131 Łódź ul. Lindleya 6 Andrzej Kozdraj, PhD	practical classes	30 hours	exam
2	ENGLISH LANGUAGE	Foreign Language Centre 90-647 Łódź pl. Hallera 1 Kinga Studzińska—Pasięka, PhD	practical classes	30 hours	exam
3	DOCTORAL SEMINAR – PUBLIC REVIEW SESSION	Head of the Doctoral School	seminar	15 hours	credit
4	ELECTIVE COURSES (selection of at least one of the following topics): 1) research team management - 5 hours, 2) reliability of conducting research studies - 5 hours, 3) workshops on preparing an application for a grant – 5 hours, 4) sociology – 5 hours.		practical classes	5 hours	credit
5	PROFESSIONAL PLACEMENT TRAINING (conducting or co-participation in conducting of didactic classes for students)	didactic classes conducted by a unit	practical classes	60 hours	credit
	Summary of Year 2 (Semesters 3 and 4) - total number of hours of classes with the participation of an academic teacher (excluding professional placement training)			80 hours	
YEAR 3 (SEMESTERS 5 and 6)					
No.	Name of the course	Unit conducting the classes	Form of classes	Number of hours	Form of awarding credit for the course
1	PHILOSOPHY WITH ETHICS	Department of Bioethics 90-131 Łódź ul. Lindleya 6 Waldemar Kwiatkowski, PhD	practical classes	30 hours	exam

2	HISTORY OF MEDICINE	Department of History of Medicine, Pharmacy and Military Medicine Maria Biegańska-Plonka, PhD	practical classes	30 hours	exam
3	DOCTORAL SEMINAR – PUBLIC REVIEW SESSION	Head of the Doctoral School	seminar	15 hours	credit
4	PROFESSIONAL PLACEMENT TRAINING (conducting or co-participation in conducting of didactic classes for students)	didactic classes conducted by a unit	practical classes	60 hours	credit
	Summary of Year 3 (Semesters 5 and 6) - total number of hours of classes with the participation of an academic teacher (excluding professional placement training)			75 hours	
YEAR 4 (SEMESTERS 7 and 8)					
No.	Name of the course	Unit conducting the classes	Form of classes	Number of hours	Form of awarding credit for the course
1	DOCTORAL SEMINAR – PUBLIC REVIEW SESSION	Head of the Doctoral School	seminar	15 hours	credit
2	PROFESSIONAL PLACEMENT TRAINING (conducting or co-participation in conducting of didactic classes for students)	didactic classes conducted by a unit	practical classes	60 hours	credit
	Summary of Year 4 (Semesters 7 and 8) - total number of hours of classes with the participation of an academic teacher (excluding professional placement training)			15 hours	