

**CURRICULUM FOR THE DOCTORAL SCHOOL
OF THE MEDICAL UNIVERSITY OF SILESIA IN KATOWICE
FOR THE ACADEMIC YEAR 2023/2024**

I. Curriculum foundations

1. The Curriculum for the Doctoral School of the Medical University of Silesia in Katowice was designed pursuant to the Act of 20 July 2018 *Law on Higher Education and Science* as well as University guidelines.
2. The Medical University of Silesia in Katowice Doctoral School educates doctoral students in the areas of medical sciences and health sciences in the following fields:
 - a) medical sciences
 - b) pharmaceutical sciences
 - c) health sciences
3. Education in SUM Doctoral School:
 - a) is conducted over the course of 8 semesters
 - b) prepares students for obtaining a doctoral degree
 - c) is led in accordance with *the Curriculum* as well as *Individual Research Plan*
4. Implementation of *the Curriculum* results in obtaining Level 8 learning outcomes as listed in the Polish Qualifications Framework (PQF) as defined in the 22.12.2015 Act on Integrated Qualifications System (Journal of Law of 2020, item 226 as amended) as well as regulations issued on the basis of art. 7 par. 3 thereof.
5. The number of ECTS credits awarded on the course is 44, with 31 ECTS credits being awarded by the end of semester 4.
6. Classes conducted as part of the Curriculum may be held with the use of distant education methods and techniques.
7. The Curriculum is conducted in Polish, save in the case of doctoral students beginning in the academic year 2022/2023, since when the leading language is English.

II. Learning objectives

1. The principal aim of the course in SUM Doctoral School is submitting doctoral dissertation by doctoral students as well as preparation for obtaining a doctoral degree.
2. Other aims include:
 - a) candidate preparation for teaching, research as well as research and development work

- b) obtaining by the doctoral student high level of competence and academic independence
 - c) doctoral student preparation for independent planning of their personal academic development as well as participation in the exchange of academic expertise in the national and international community
 - d) acquiring by the doctoral student the skills of drawing upon world scientific achievements; identifying and providing solutions for research problems; planning, pursuing and elaborating on a research as well as disseminating research results during conventions and academic conferences.
3. SUM Doctoral School supports doctorate mobility via enabling its students participation in international exchange programmes as well as taking part in national and foreign academic conferences.

III. Learning outcomes

1. The expected learning outcomes as listed in the table below include second stage level descriptors of Polish Qualification Framework typical for Level 8 qualifications attained in higher education, while SUM Doctoral School learning outcomes refer to medical sciences, pharmaceutical sciences, health sciences.

Key descriptive categories	Descriptor code	Second stage generic descriptors, level 8 PQF
KNOWLEDGE (one knows and understands)		
Scope and depth of understanding – completeness of the cognitive perspective and dependencies	P8S_WG	<ul style="list-style-type: none"> - the world's achievements relating to theoretical foundations, general and selected specific issues of the academic discipline in question at a level enabling the revision of existing paradigms - key developmental trends in the academic disciplines essential to the study programme - the methodology of scientific research
Context – circumstances, results	P8S_WK	<ul style="list-style-type: none"> - the fundamental dilemmas of modern civilization - the economic, legal and other essential conditions of conducting scientific research - the basic conditions of knowledge transfer to the economic and social

		sphere as well as commercialization of research findings and know-how related to these findings.
SKILLS (one is able to)		
Problem-solving and application of knowledge in practice	P8S_UW	<ul style="list-style-type: none"> - use knowledge from different academic fields to creatively identify, formulate and innovatively solve complex problems or perform research activities, especially: define the aim and subject of the research, formulate a research hypothesis, develop research methods, techniques and tools and use them creatively, draw conclusions on the basis of research findings - critically analyse and assess scientific research results, work of experts and other creative activities together with their contribution to knowledge development - transfer scientific research findings to the economic and social spheres
Communication – forming and receiving messages, promoting knowledge within the academic community, using a foreign language	P8S_UK	<ul style="list-style-type: none"> - communicate on specialist issues at a level that allows active participation in the international scientific community - disseminate research results, also to the general public - initiate debates - participate in academic discourse - use a foreign language at B2 level of the Common European Framework of Reference that enables active participation in international academic and professional communities
Work organisation – planning and teamwork	P8S_UO	<ul style="list-style-type: none"> - plan and implement individual and team scientific research, also within the international community
Learning - planning self-development and the development of others	P8S_UU	<ul style="list-style-type: none"> - autonomously plan and act for the sake of one's own development as well as inspire and organise the development of others

		- plan educational classes or groups of classes and conduct them using modern methods and tools
Social competence (one is ready to)		
Assessment – critical approach	P8S_KK	- critically evaluate the achievements of one’s own academic discipline - critically evaluate one’s own contribution into the development of a given academic discipline
Responsibility – fulfilling social obligations and acting in the public interest	P8S_KO	- fulfil the social obligations of researchers and creators - initiate activities in the public interest - think and act in an entrepreneurial manner
Professional role – independence and ethos development	P8S_KR	- maintain and develop the ethos of scientific communities, including: conducting research in an independent manner, respecting the principle of public ownership of results of academic research, taking into account protection of intellectual property

IV. Verification of learning outcomes

1. Achievement of the learning outcomes within a given course included in the Curriculum is confirmed by: credit, graded credit, examination, and completion of commissioned clerkship.
2. Curriculum implementation schedule defines the type of credit for each course.
3. The lecturer decides on the form of crediting a course (written, oral) and informs the doctoral students thereof.
4. Learning outcomes are also verified by:
 - a. the execution of *Individual Research Plan* execution. The *Plan* is devised by a doctoral student in agreement with their supervisor within the first 12 months of attending SUM Doctoral School and must include the doctoral dissertation preparation schedule,
 - b. mid-term evaluation carried out halfway through the study period by the Mid-term Evaluation Committee
4. Detailed rules for the implementation of Individual Research Plan and mid-term evaluation are laid down in the *SUM Doctoral School Regulations*.

V. Curriculum implementation schedule

1. SUM Doctoral School Curriculum implementation schedule determines:

- a. **general** courses – mandatory for all SUM Doctoral School students of a given academic year
- b. **modular** courses for particular fields of study. Their scope depends on the character of the planned doctoral dissertation
 - module 1 – medical sciences
 - module 2 – pharmaceutical sciences
 - module 3 – health sciences
- c. number of course contact hours, including the form thereof: lecture, class, seminar
- d. time required per teaching practice
- e. form of course credit and teaching practice completion

2. The following Schedule, as referred to in par. 1, is established:

Curriculum implementation schedule at SUM Doctoral School for the academic year 2023/2024

Year 1 (semester 1, 2)							
<i>no.</i>	<i>Course</i>	<i>course status</i>	<i>course type / academic hours</i>			<i>form of credit</i>	<i>ECTS</i>
			<i>lecture</i>	<i>Class</i>	<i>seminar</i>		
1	Ethical and Legal Aspects of Research with Elements of Intellectual Property	general	12	-	-	graded credit	1
2	Didactics in Higher Education	general	-	-	20	graded credit	2
3	(Bio)statistics	general	-	20	-	graded credit	2
4	Research Funding	general	2	3	-	credit	1
5	Medical Information Science	general	-	15	-	graded credit	2
6	Self-presentation Workshop	general	-	10	-	graded credit	1
7	Research Methodology	modular	-	-	15	exam	2

8	Dissertation Seminar	general	30 hours	credit	3
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<i>no.</i>	<i>Internship</i>	<i>hours</i>	<i>form of credit</i>	<i>ECTS</i>
1	Teaching practice – conducting or co-conducting classes	10	Credit	1

Year 2 (semester 3, 4)

<i>no.</i>	<i>Course</i>	<i>course status</i>	<i>course type / academic hours</i>			<i>form of credit</i>	<i>ECTS</i>
			<i>lecture</i>	<i>Class</i>	<i>seminar</i>		
1	English for Presentations and Research Publication Purposes	general	-	-	20	graded credit	2
2	Methodology of Doctoral Dissertation Preparation	general	3	2	-	graded credit	1
3	Psychology of Social Communication	general	5	-	5	credit	1
4	Effective Scientific Article Publication	general	4	-	12	graded credit	2
5	Modern Research Methods and Techniques	modular*	-	30	-	credit	3
6	Modern Teaching Methods	general	-	10	10	graded credit	2
7	Dissertation Seminar	general	30 hours			credit	3

<i>no.</i>	<i>Internship</i>	<i>hours</i>	<i>form of credit</i>	<i>ECTS</i>
1	Teaching practice – conducting or co-conducting classes	60	Credit	2

Year 3 (semester 5, 6)

no.	Course	course status	course type / academic hours			form of credit	ECTS
			lecture	Class	seminar		
1	Modern Medical Technologies / Robots in Health Care	general	5	10	-	graded credit	2

MODULE 1 – MEDICAL SCIENCES

1	Differential Psychology / Health Promotion and Education*	modular	-	-	10	graded credit	1
2	Dissertation Seminar	general	30 hours			credit	3

* an elective opened if chosen by the minimum of 10 doctoral students

MODULE 2 – PHARMACEUTICAL SCIENCES

1	Teamwork Skills Development / Competences of Academic Teachers*	modular	-	-	10	graded credit	1
2	Dissertation Seminar	general	30 hours			credit	3

* course chosen by doctoral students in a given discipline, carried out as an elective course based on the majority rule

MODULE 3 – HEALTH SCIENCES

1	Public Health with Elements of Law and Economy / History and Sociology of Medicine*	modular	-	-	10	graded credit	1
2	Dissertation Seminar	general	30 hours			credit	3

* course chosen by doctoral students in a given discipline, carried out as an elective course based on the majority rule

no.	Internship	hours	form of credit	ECTS
1	Teaching practice – conducting or co-conducting classes	60	credit	2

Year 4 (semester 7, 8)

<i>no.</i>	<i>course</i>	<i>course status</i>	<i>course type / academic hours</i>			<i>form of credit</i>	<i>ECTS</i>
			<i>lecture</i>	<i>class</i>	<i>seminar</i>		

MODULE 1 – MEDICAL SCIENCES

1	Dissertation Seminar	general	30 hours			3
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MODULE 2 – PHARMACEUTICAL SCIENCES

1	Dissertation Seminar	general	30 hours			3
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MODULE 3 – HEALTH SCIENCES

1	Dissertation Seminar	general	30 hours			3
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<i>no.</i>	<i>Internship</i>	<i>hours</i>	<i>form of credit</i>	<i>ECTS</i>
1	Teaching practice – conducting or co-conducting classes	60	credit	2

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