

**PROGRAMME OF THE FIRST DOCTORAL SCHOOL  
OF THE MEDICAL UNIVERSITY OF GDAŃSK**

**MODULE I: COMPULSORY COURSES**

**YEAR I**

Course	Semester	Total No. of hours	Course form			Course crediting form	Educational outcomes: P8S_
			L	S	PT		
Law and Ethics in Science	I	5	-	5	-	credit test	KR, WK +++ UW ++ UK, UO, WG, KO +
Intellectual Property Protection	I	5	-	5	-	credit test	WG, KR +++ WK, UW, UO, UU +
Methodology of Conducting Research, Scientific Discourse	I - II	5	5		-	credit test	WG +++ KK ++ WK, UK, UU, KR +
Methodology of Presentation and Dissemination of the Research Results	II	10	-	10	-	graded credit test	UK +++ WG +
Doctoral seminar in individual disciplines of science	II	5	-	5	-	credit test	UK, KK +++ WG, UW ++ WK, KR +
<b>Total</b>		<b>30</b>					

Practical vocational training	Total No. of hours	Course crediting form	Educational outcomes: P8S_
Teaching students – co-participation in teaching	60	credit test	UU +++ WG, UW, UK, UO, KK, KO, KR +

**Additional requirements pursuant to the Law of Higher Education and Science Act and the Regulations of the Doctoral School:**

- Appointment of the supervisor – within 3 months after the commencement of studies.
- Submission of the individual research plan – within 12 months after the commencement of studies.

**YEAR II**

Course	Semester	Total No. of hours	Course form			Course crediting form	Educational outcomes: P8S_
			L	S	PT		
Philosophy of Science with History of Medicine and Pharmacy	I	15	15	-	-	credit test	WK ++ WG, UK, UO, KR +
Statistical Methods in Scientific Research	II	15	-	5	10	exam	WG, UW, UK +
Interdisciplinary Doctoral Seminar	II	15	-	15	-	credit test	UK, KK +++ WG, UW ++ WK, KR +
<b>Total</b>		<b>45</b>					

Practical vocational training	Total No. of hours	Course crediting form	Educational outcomes: P8S_
Teaching students	60	credit test	UU +++ WG, UW, UK, UO, KK, KO, KR +

**Additional requirements pursuant to the Law of Higher Education and Science Act and the Regulations of the Doctoral School:**

- Doctoral student's mid-term assessment

### YEAR III

Course	Semester	Total No. of hours	Course form			Course crediting form	Educational outcomes: P8S_
			L	S	PT		
Commercialisation of Research Results	I-II	10	-	10	-	credit test	KO +++ WK ++ UW, KR +
Doctoral seminar in individual disciplines of science	II	5	-	5	-	credit test	UK, KR +++ WG, UW ++ WK, KR +
Propaedeutics of medical sciences <sup>1)</sup>	I-II	20	-	20	-	credit test	WG, UW +++
Propaedeutics of pharmaceutical sciences <sup>2)</sup>	I-II	20	-	20	-	credit test	WG, UW +++
Propaedeutics of health sciences <sup>3)</sup>	I-II	20	-	20	-	credit test	WG, UW +++
<b>Total</b>		<b>75</b>					

Practical vocational training	Total No. of hours	Course crediting form	Educational outcomes: P8S_
Teaching students	60 <sup>4)</sup>	credit test	UU +++ WG, UW, UK, UO, KR, KO, KR +

- 1) Obligatory subject for PhD students in pharmaceutical sciences and in health sciences and for PhD students in medical sciences who are not graduates of medicine or dental medicine.
- 2) Obligatory subject for PhD students in medical sciences and in health sciences and for PhD students in pharmaceutical sciences who are not graduates of the pharmacy or pharmaceutical and cosmetic industry.
- 3) Obligatory subject for PhD students in medical sciences and in pharmaceutical sciences and for PhD students in health sciences who are not graduates of the Faculty of Health Sciences.
- 4) Does not apply to doctoral students working as lecturers tutor.

### YEAR IV

Course	Semester	Total No. of hours	Course form			Course crediting form	Educational outcomes: P8S_
			L	S	PT		
Interdisciplinary Doctoral Seminar	II	15	-	15	-	credit test	UK, KR +++ WG, UW ++ WK, KR +
<b>Total</b>		<b>15</b>					

Practical vocational training	Total No. of hours	Course crediting form	Educational outcomes: P8S_
Teaching students	60 <sup>1)</sup>	credit test	UU +++ WG, UW, UK, UO, KR, KO, KR +

- 1) Does not apply to doctoral students working as lecturers tutor.

#### **Additional requirements pursuant to the Law of Higher Education and Science Act and the Regulations of the Doctoral School:**

- Submission of the doctoral dissertation, in accordance with the approved schedule.

#### **MODULE II: ELECTIVE COURSES:**

Doctoral students are obliged to take 45 hours of elective courses over the entire course of studies.

The offer of the elective courses to be selected by the doctoral students is prepared and approved by the Board of the First MUG Doctoral School for each academic year.

### SUMMARY OF HOURS:

	Compulsory courses	Elective courses	Practical training	Total
Year I	30	at min. 45	60	<b>450</b>
Year II	45		60	
Year III	75		60	
Year IV	15		60	
<b>Total</b>	<b>165</b>	<b>45</b>	<b>240</b>	

### Attainment of the educational outcomes in individual courses:

	Realization of the subject in year:	P8S_WG	P8S_WK	P8S_UW	P8S_UK	P8S_UO	P8S_UU	P8S_KK	P8S_KO	P8S_KR
Intellectual Property Protection	I	+++	+	+		+	+			+++
Law and Ethics in Science	I	+	+++	++	+	+			+	+++
Methodology of Conducting Research, Scientific Discourse	I	+++	+		+		+	++		+
Methodology of Presentation and Dissemination of the Research Results	I	+			+++					
Doctoral seminar in individual disciplines of science	I and III	++	+	++	+++	++		+++		+
Teaching students	I - IV	+		+	+	+	+++	+	+	+
Philosophy of Science with History of Medicine and Pharmacy	II	+	++		+	+				+
Statistical Methods in Scientific Research	II	+		+	+					
Interdisciplinary Doctoral Seminar	II and IV	++	+	++	+++	+++		+++		+
Commercialisation of Research Results	III		++	+				+	+++	
Propaedeutics of health sciences	III	+++		+++						
Propaedeutics of medical sciences	III	+++		+++						
Propaedeutics of pharmaceutical sciences	III	+++		+++						

Description of level two outcomes			
Category of the outcome description	Descriptive category Aspects of major significance	8 PRK	Outcome symbol
Knowledge: the student knows and understands	the scope, depth, and completeness of the cognitive perspective and interdependencies	<ul style="list-style-type: none"> <li>● to the degree enabling revision of the existing paradigms; the global output including the theoretical foundations, as well as general issues and selected specific issues typical for the given discipline of science;</li> <li>● major developmental trends in the studied scientific discipline</li> <li>● methodology of research</li> <li>● the rules of disseminating the results of research activities, public access included</li> </ul>	P8S_WG
	the context, determinants, effects	<ul style="list-style-type: none"> <li>● the fundamental dilemmas of modern civilisation</li> <li>● economic, legal, ethical, and other major determinants of research</li> <li>● major principles of transferring knowledge to business and the society, and of commercialisation of the research results and the know-how related thereto</li> </ul>	P8S_WK
Skills: the student can	application of knowledge; the problems solved and tasks performed	<ul style="list-style-type: none"> <li>● use knowledge of different fields of science to creatively identify, formulate, and solve complex problems in an innovative way or perform tasks of research nature, and in particular: <ul style="list-style-type: none"> <li>- define the goal and subject matter of research, formulating the research hypothesis</li> <li>- develop the research methods, techniques, and tools and apply them creatively</li> <li>- draw conclusions from the research results</li> </ul> </li> <li>● perform critical analysis and assessment of the research results, expert reviews, and other works of creative nature, and of their contribution to the development of knowledge</li> <li>● transfer the results of research to business and the society</li> </ul>	P8S_UW
	communication; reception and creation of an utterance, dissemination of knowledge in the research circles, and use of a foreign language	<ul style="list-style-type: none"> <li>● discuss specialist topics to a degree enabling active participation in the international research circles</li> <li>● disseminate the results of research, also in popular forms</li> <li>● initiate a debate</li> <li>● participate in scientific discourses</li> <li>● use a foreign language at the level corresponding with level B2 of the Common European Framework of Reference for Languages to a degree enabling participation in international research and professional life</li> </ul>	P8S_UK
	work organisation and planning, team work	<ul style="list-style-type: none"> <li>● plan and carry out individual and team projects of research or creative nature, also in the international environment</li> </ul>	P8S_UO
	learning; planning one's own and other people's development	<ul style="list-style-type: none"> <li>● independently plan own development and act to achieve it, as well as inspire and arrange the development of others</li> <li>● plan classes or class groups and hold them using modern methods and tools</li> </ul>	P8S_UU
Social skills: the student is prepared to	assessment critical approach	<ul style="list-style-type: none"> <li>● carry out critical assessment of the output in a specific discipline of science</li> <li>● carry out critical assessment of his/her own contribution to the development of the specific discipline of science</li> <li>● recognise the significance of knowledge in solving cognitive and practical problems</li> </ul>	P8S_KK
	responsibility fulfillment of social obligations and taking actions in public interest	<ul style="list-style-type: none"> <li>● fulfil social obligations of researchers and creators</li> <li>● initiate actions in public interest</li> <li>● think and act in an entrepreneurial way</li> </ul>	P8S_KO
	professional role independence and development of the ethos	<ul style="list-style-type: none"> <li>● maintain and develop the ethos of the research and creative circles, including: <ul style="list-style-type: none"> <li>- pursuing research independently</li> <li>- respecting the rule of public ownership of the research results, taking into account the rules of intellectual property protection</li> </ul> </li> </ul>	P8S_KR