

**Education Programme
in Biomedical Sciences ((8 semesters)
in the discipline of biological sciences
conducted in English
at the Doctoral School of Exact
and Natural Sciences**

I

General provisions

1. The education programme in Biomedical Sciences has been developed according to the Act of 20 July 2018 on Law on Higher Education and Science and the guidelines in force at the Jagiellonian University in Kraków.
2. The education programme leads to achieving learning outcomes for the qualifications at Level 8 of the Polish Qualification Framework (PQF).
3. The education programme in Biomedical Sciences lasts 8 semesters.
4. English is a medium of instruction of the education programme in Biomedical Sciences.
5. Detailed requirements and eligibility criteria for admission to the programme are defined in the admission terms and conditions as approved by the Jagiellonian University Senate.
6. Within 12 months of the commencement of the programme, a doctoral student shall submit an Individual Research Plan (IRP) to the education programme coordinator for their opinion and submission to the Director of the Doctoral School.
7. A doctoral student is required to achieve a minimum of 40 ECTS credits (ECTS – European Credit Transfer and Accumulation System) allocated to the Biomedical Sciences education programme and to attain all the required learning outcomes at the Level 8 of the Polish Qualification Framework, of which:
 - a minimum of 30 ECTS is related to the preparation to conduct and communicate research;
 - a minimum of 25 ECTS is completed by the end of the semester in which mid-term assessment is conducted.
8. Detailed instruction for achieving and assessing learning outcomes shall be specified in the syllabuses of the individual courses.

II

Professional traineeship

1. Professional traineeship shall take the form of teaching or co-teaching. Professional traineeship can be conducted also in scientific or industrial laboratories.
2. In agreement and at the application of a doctoral student, the programme coordinator may accept other forms of professional traineeship, including didactic traineeship, such

as conducting classes promoting science, providing such a form ensures achieving all the learning outcomes allocated to the professional traineeship.

3. The number of hours of professional traineeship shall not exceed 60 teaching hours (a teaching hour equals 45 minutes) per academic year.
4. Professional traineeship is optional.

III

Study and research progress assessment

1. The supervisor(s), in cooperation with the programme coordinator and the Director of the Doctoral School, shall supervise implementing the education programme and the Individual Research Plan of the doctoral student.
2. Annually, but no later than at the end of the 10th month after the commencement of the education at the Doctoral School, a doctoral student shall submit to the programme coordinator a written report on the implementation of the Individual Research Plan, reviewed by the supervisor(s) and the auxiliary supervisor.
3. The programme coordinator shall assess the degree of implementing the study and research work based on information from the doctoral student as defined in point 2, and a report from the University Study-Oriented System (USOS).
4. Any change to the Individual Research Plan, in particular modifying or rescheduling the doctoral student's duties, shall require consulting the programme coordinator.
5. The programme coordinator may decide to reschedule the doctoral student's duties resulting from the education programme and to accept courses or activities not specified in the education programme as part of the performance of the duties (with the relevant allocation of ECTS credits), provided that changes to the Individual Research Plan are not needed. Such courses may be taken in place of obligatory courses as well as other courses.
6. When additional funding is available or in well justified cases, the programme coordinator, in consultation with School representatives of the Jagiellonian University PhD Student Association and the Director of the Doctoral School, may oblige doctoral students to take courses not specified in the education programme.
7. By the end of the 24th month of education, a doctoral student shall be subject to mid-term assessment before the assessment committee appointed by the Director of the Doctoral School.
8. The date of the mid-term assessment is established by the Director of the Doctoral School on the proposal of the programme coordinator.
9. One month before the scheduled meeting of the mid-term assessment committee, the doctoral student shall submit to the programme coordinator a written report on the implementation of the Individual Research Plan. The report has to be approved by the supervisor(s) and the auxiliary supervisor before submission.
10. Meetings of the mid-term assessment committee shall be attended by the committee members, and the doctoral student in those parts to which they have been invited, in accordance with separate provisions.

IV
Schedule
SCHEDULE FOR THE EDUCATION PROGRAMME IN BIOMEDICAL SCIENCES

DOCTORAL SCHOOL OF EXACT AND NATURAL SCIENCES EDUCATION PROGRAMME IN BIOMEDICAL SCIENCES (8 semesters)						
ITEM	AIM	DESCRIPTION	PQF/PRK*	SEMESTER	NUMBER OF ECTS	NUMBER OF HOURS
OBLIGATORY ACTIVITIES AT THE DOCTORAL SCHOOL OF EXACT AND NATURAL SCIENCES (36 ECTS)						
English C1 level		A course in English at C1 level; if a PhD student holds a C1 certificate, the course / <i>lektorat</i> can be passed / approved by the Jagiellonian Language Center /Jagiellońskie Centrum Językowe without attending classes Assessment: examination	P8S-UK	I-IV	4	60
New research techniques		It is essential to acquire new experimental techniques and research methodologies to conduct and accomplish research. Training involves, e.g. sessions delivered by external schools, methodological courses, equipment operation courses, or trainings ad hoc delivered during research by more experienced colleagues. Participation is documented in the form of certificates or reports confirmed by a research supervisor / coordinator, supervisor or a training provider in a given technique and approved by the education programme coordinator. The report includes a description of the technique(s) and indication of the time spent by the PhD student learning and implementing the	P8S-WG P8S-UW	I-IV	15	300

	<p>technique(s). The PhD student becomes familiar with the techniques and research equipment available at MCB, JCET, Solaris* and other units.</p> <p>Assessment: credit on the basis of reports</p>				
<p>Consultations with Thesis Advisory Committee</p>	<p>Thesis Advisory Committee (TAC) consists of an academic adviser / supervisor, a person working at MCB, JCET or Solaris, and a person from outside these units who holds a PhD degree. TAC can be selected by the PhD student themselves. The appointment of the Team and the first consultation have to take place within the first 9 months of the commencement of the education programme. The consultation meeting consists of: a 30-minute presentation, a 30-minute discussion, a 15-minute discussion without participation of an academic adviser / supervisor, a 15-minute discussion over the proposals, and an advisory session. The PhD student arranges one TAC meeting every 12 months.</p> <p>Assessment: credit on the basis of the report on the TAC meeting</p>	<p>P8S-KK P8S-UK P8S-UU P8S-KR</p>	<p>I-VIII</p>	<p>2 (1 out of 2 per year)</p>	<p>Meeting with Thesis Advisory Committee</p>
<p>Communicating science: academic talks</p>	<p>As part of the education programme, each PhD student presents a poster (1st year), an oral presentation (2nd year) at internal conferences or symposia organised by MCB, JCET or Solaris; research results are presented during internal seminars organised by MCB, JCET, Solaris, i.e. Golden Seminar at MCB (3rd year); in the final year (4th year) PhD student organises their own symposium at MCB or JCET; such research-oriented presentations may be substituted by similar performances at other conferences or symposia.</p> <p>Form of assessment: credit on the basis of confirmation of participation with contribution</p>	<p>P8S-UK P8S-UW P8S-KO</p>	<p>I-VIII</p>	<p>2 (1 out of 2 per year)</p>	<p>50</p>

Interdisciplinary seminars	<p>Participation in seminars conducted at MCB, Solaris and JCET; or participation in seminars, training courses, talks, etc. related to the PhD student's research</p> <p>Assessment: credit on the basis of confirmation of participation with contribution</p>	<p>P8S-KK P8S-WG P8S-UK</p>	<p>I-VIII (100 hrs to be completed in I-IV semester)</p>	6	150
International conferences	<p>Participation with presentation in at least one international conference</p> <p>Form of assessment: credit on the basis of confirmation of participation with contribution</p>	<p>P8S-UK P8S-WG P8S-WK</p>	I-IV	1	25
Intellectual Property Law	<p>A course discussing selected issues of research independence, ownership of research results, protection of intellectual property and social obligations of researchers and creators.</p> <p>Assessment: examination</p>	<p>P8S-WK P8S-KO P8S-KR</p>	I-VI	1	15
Academic or R&D competencies development	<p>Activities aimed at communicating research results (preparing posters, abstracts, research results / visuals for publication); preparing grant applications, conducting negotiations, developing managerial skills, in particular managing research projects and research team, etc.</p> <p>Assessment: credit on the basis of a PhD student's written report / confirmation of participation</p>	<p>P8S-UU P8S-WK P8S-UK P8S-UW P8S-UO</p>	I-IV	3	70
Bioethics	<p>A course discussing the ethos of scientific work and the social obligations of researchers and creators.</p> <p>Assessment: examination</p>	<p>P8S-KR P8S-KO</p>	I-VI	2	30

ELECTIVE ACTIVITIES (2 ECTS MINIMUM)					
Intersector activities	Career Days: meetings with the representatives of science, research grant winners to get familiar with their tutoring methods; meetings with biotech business representatives; meetings with editors of academic journals; meetings are organized by PhD students to present alternative professional career paths Assessment: on the basis of a written report	P8S-WK P8S-UW	I-IV	1	25
Promoting science	Participation in the events organised with the purpose of promoting science, such as Malopolska Night of Scientists or University for Children Assessment: on the basis of participation confirmation	P8S-UU P8S-KO P8S-UU	I-IV	1	25
General knowledge development	One course out of a range of courses offered before each academic year (e.g. a course in philosophy, ethics, IA or cosmology) Assessment: examination	P8S-UW P8S-KR P8S-WK	I-VIII	2 for 30 hrs	60 or 30
ELECTIVE JOINT ACTIVITIES FOR THE DOCTORAL SCHOOL OF EXACT AND NATURAL SCIENCES (2 ECTS MINIMUM)					
Polish for foreigners	A course in Polish for PhD students Assessment: examination	P8S-UU	I-VIII	4	60
Modern foreign language	A course in modern foreign language Assessment: examination	P8S-UU	I-VIII	4	60
Soft skills development	A course selected by a PhD student from a range of courses offered before each academic year (e.g. career planning, managerial skills, business communication) Assessment: as provided in the course syllabus	P8S-WK P8S-KR P8S-KO	I-VIII	2 for 30hrs	30

Doctoral School Seminars	Monthly events in English delivered by Jagiellonian University researchers and the University guests Assessment: credit without grade	P8S-WG P8S-UW P8S-UK	I-VIII	4 (1x4)	6 seminars per academic year
ELECTIVE ACTIVITIES DEVELOPING PROFESSIONAL SKILLS (0 ECTS minimum)					
Courses and activities developing competencies needed to implement IRP (e.g. summer schools, courses run by Polish and foreign universities)	Assessment: credit without grade	P8S-UW P8S-UK P8S-UU	I-VIII	1/2	30 or 60
<p>Additional obligatory courses:</p> <ol style="list-style-type: none"> 1. PhD students who start their education in the Doctoral School are required to complete a Health and Safety at Work training / BHP. 2. First Aid course (theoretical part and practical part) is to be completed by the end of the 2nd semester. 3. PhD students who plan research involving vertebrate animals are required to take training to obtain appropriate qualifications. 					

*PQF /PRK – Polish Qualifications Framework / *Polska Rama Kwalifikacji* in accordance with the Regulation of the Minister of Science and Higher Education on the characteristics of second-level learning outcomes for qualifications at Levels 6-8 of the Polish Qualifications Framework.

<https://prk.men.gov.pl/en/1en/>

Conducting research and preparing a doctoral dissertation within the meaning of Article 187(3) of the Act of 20 July 2018 - Law on Higher Education and Science (i.e. Journal of Laws of 2023, item 742 as amended) fulfills in part achieving all types of learning outcomes for qualifications at Level 8 of the PQF. The achievement of these outcomes is verified by the supervisor.

Doctoral students with disabilities and persons in a special health situation may apply for the adaptation of the education process realisation to their needs, according to the principles specified in the order of the Jagiellonian University Rector.

* MCB, JCET, Solaris are the Jagiellonian University units:

Małopolskie Centrum Biotechnologii / Małopolska Center of Biotechnology (MCB)

Jagiellońskie Centrum Rozwoju Leków / Jagiellonian Centre for Experimental Therapeutics (JCET)

Narodowe Centrum Promieniowania Synchrotronowego Solaris / National Synchrotron Radiation Centre Solaris

V

Final provision

The *Biomedical Sciences* education programme in the discipline of biological sciences at the Doctoral School of Exact and Natural Sciences shall enter into force on the date of the Resolution.