

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

I

General provisions

1. The education programme in Biomedical Sciences has been established according to the Act of 20 July 2018 on the Law on Higher Education and the guidelines applicable at the Jagiellonian University in Kraków.
2. The education programme leads to the achievement of level 8 learning outcomes as defined according to the Polish Qualifications Framework.
3. The education programme lasts **8 semesters**.
4. English is the language of instruction for this education programme.
5. The detailed requirements and admission criteria to the programme are defined within the terms and conditions for admission as approved by the Senate.
6. Within 12 months from the date of commencement of education, a doctoral student is to submit an Individual Research Plan to the co-ordinator of the education programme.
7. The number of ECTS credits (European Credit Transfer and Accumulation System) allocated to the Biomedical Sciences education programme is a minimum of 40 credits, out of which:
 - a minimum of 30 ECTS credits related to the preparation of the doctoral student to conduct research and publish its results;
 - a minimum of 25 ECTS credits the doctoral student shall complete by the end of the 4th semester.
8. The rules on achieving learning outcomes and the manner of their assessment are specified in the syllabuses of the individual courses.

II

Professional traineeships

1. Professional traineeships shall take the form of conducting classes with students as well as assisting in this process. They can also be implemented in the form of internship in scientific or industrial laboratories.
2. Professional traineeships can also take the form of conducting activities with the purpose of popularizing science.
3. The number of hours allocated for professional traineeship cannot exceed 60 hours per academic year.

4. Professional traineeships are not obligatory.

III

Mode of study and research progress assessment

1. The supervisor shall supervise the doctoral student's programme of study and the individual research plan.
2. Annually, but no later than by the end of the 10th month from the commencement of education, the supervisor shall submit to the education programme co-ordinator written information on the implementation of the individual research plan and the assessment of the PhD student's progress.
3. The education programme co-ordinator evaluates the implementation of study and research progress on the basis of the PhD student's report and the report from the Electronic University System for Study Support.
4. Changing an individual research plan, in particular, changing or postponing some of the doctoral student's duties to another date, requires the approval of the education programme co-ordinator.
5. The education programme co-ordinator may decide to accept as part of the performance of duties (with the appropriate allocation of ECTS credits) courses or classes not specified within the education programme.
6. By the end of the 4th semester, the PhD student shall be subject to a mid-term assessment before the committee appointed by the director.
7. The mid-term assessment date is established by the education programme co-ordinator.
8. 30 days before the scheduled committee meeting, the PhD student shall submit to the education programme co-ordinator a written report on the implementation of his/her individual research plan. The report must be approved by the supervisor before submission.
9. Members of the committee and the PhD student, in the parts to which s/he was invited, participate in the meetings of the committee conducting the mid-term assessment.

IV

Schedule for the education programme in Biomedical Sciences

DOCTORAL SCHOOL OF EXACT AND NATURAL SCIENCES EDUCATION PROGRAMME IN BIOMEDICAL SCIENCES					
Item	Objective Description	PQF*	Semester	ECTS	No of hours
OBLIGATORY ACTIVITIES WITHIN THE DOCTORAL SCHOOL OF EXACT AND NATURAL SCIENCES (34 ECTS CREDITS)					
English language course	English classes at C1 level (the course can be credited by JLC without necessity to attend classes when possessing a certificate at C1 level) Assessment: exam	P8S_UK	I-IV	4	60
Learning new research techniques	Learning new experimental techniques and research methodology necessary to carry out research on the subject of the doctoral dissertation being prepared. Organized training (external schools, methodological courses, equipment maintenance courses, etc.) or ad hoc training during the research implementation by more experienced colleagues. Documented in the form of certificates or reports confirmed by the research director or other person conducting training in the selected technique and approved by education programme co-ordinator. The report describes the techniques and the time spent by the PhD student in learning and implementing the technique. The PhD student will learn about the techniques and research equipment available in MCB / JCET / Solaris and other units. Assessment: certificate	P8S_WG P8S_UW	I-IV	15	300

<p>PhD student consultations with the Thesis Advisory Committee (TAC)</p>	<p>Thesis Advisory Committee (TAC) consists of: Group Leader, Supervisor, MCB, JCET or Solaris staff member, and a person (holding PhD degree) from outside these units, who can be indicated by the PhD student. Establishing the Team and its first consultation/advisory meeting has to take place within the first 9 months of the education. The consultation consists of: presentation –30 mins, discussion –30 mins, discussion without Group Leader and Supervisor –15 mins, formulating conclusions and advisory session – 15 mins. The PhD student organizes one meeting every 12 months.</p> <p>Assessment: minutes of the meeting</p>	<p>P8S_WG P8S_KK P8S_UK P8S_UU P8S_KR</p>	<p>I-VIII</p>	<p>2 (1/2 a year)</p>	<p>PhD student consultations with Thesis Advisory Committee (TAC)</p>
<p>PhD student's presentations</p>	<p>As part of the education programme, each PhD student presents a poster (1st year), an oral presentation (2nd year) during the annual summer school organized by the MCB. The 3rd year PhD student presents his/her research results at the Golden seminar at the MCB. 4th year PhD students are required to organize their own symposium at the MCB or JCET. Presentations may be replaced by similar presentations at other organized conferences, symposia, etc.</p> <p>Assessment: confirmation of active participation</p>	<p>P8S_UK P8S_UW P8S_KO</p>	<p>I-VIII</p>	<p>2 (1/2 a year)</p>	<p>50</p>
<p>Interdisciplinary seminars</p>	<p>Participation in a series of seminars at MCB and JCET or other organized seminars, trainings, speeches, etc. in the field of research.</p>	<p>P8S_KK P8S_WG</p>	<p>I-VIII (including 100h in I-IV)</p>	<p>6</p>	<p>150</p>

	Assessment: confirmation of participation	P8S_UK			
International conferences	Active participation in at least one international conference. Assessment: confirmation of active participation	P8S_UK P8S_WG P8S_WK	I-IV	1	25
'Intellectual property' course	Course on selected issues of research independence, ownership of research results, protection of intellectual property and social obligations of researchers and innovators.	P8S_WK P8S_KO P8S_KR	I-VI	1	15
Professional skills development; preparation for research or R&D work	Communicating research results (posters, abstracts, preparation of results/illustrations for publication), team communication, communication with a superior, preparation of grant applications, statistical analysis and bioinformatics, effective negotiations, research projects management and research team work, social media in science. Assessment: written report/ confirmation of active participation	P8S_UU P8S_WK P8S_UK P8S_UW P8S_UO	I-IV	3	70
OPTIONAL ACTIVITIES (MINIMUM 2 ECTS CREDITS)					
Cross-sectoral activities	Career Days – meetings with the representatives of the scientific industry, winners of research grants to see their tutoring methods, entrepreneurs (from biotech companies), and scientific journal editors; The meeting are organized by PhD students to recognise alternative professional paths. Assessment: written report	P8S_WK P8S_UW	I-IV	1	25

Outreach activities	Active participation in the activities aimed at popularizing science, e.g. Researchers' Night, Children's University, etc. Assessment: confirmation of active participation	P8S_UU P8S_KO	I-IV	1	25
General knowledge development courses	One course selected from a range of courses offered before a given academic year, e.g. philosophy, ethics, artificial intelligence, cosmology. Assessment: exam	P8S_UW P8S_KR P8S_WK	I-VIII	2 for 30 hours	60 hours or 30 hours
OPTIONAL JOINT ACTIVITIES FOR THE DOCTORAL SCHOOL OF EXACT AND NATURAL SCIENCES (MINIMUM 2 ECTS CREDITS)					
Polish language for foreigners	Polish for foreign PhD students Assessment: exam	P8S_UU	I-VIII	4	60 hours
Foreign language course	Modern foreign language course Assessment: exam	P8U_UU	I-VIII	4	60 hours
Soft skills development course	A course selected from a range of courses offered before a given academic year, e.g. career planning, managerial skills, business communication. Assessment: provided in the course syllabus	P8S_WK P8S_KR P8S_KO	I-VIII	2 for 30 hours	30 hours
Doctoral School Seminar	A monthly interdisciplinary seminar with lectures in English delivered by invited Jagiellonian University researchers and guest researchers. Assessment: credit	P8S_WG P8S_UW P8S_UK	I-VIII	4 (1x4)	6 seminars a year

OPTIONAL ACTIVITIES TO DEVELOP PROFESSIONAL SKILLS (MINIMUM 0 ECTS CREDITS)					
Other courses and activities leading to attaining competences to accomplish Individual Research Plan (e.g. summer schools, courses at other universities, including foreign ones)	Assessment: credit	P8S_UW P8S_UK P8S_UU	I-VIII	1/2	30 hours or 60 hours
<p>Mandatory additional training:</p> <ol style="list-style-type: none"> 1. PhD students starting their education are required to complete occupational health and safety training. 2. First Aid course (theoretical and practical part) to be carried out by the end of the 2nd semester. 3. PhD students planning research involving vertebrate animals are required to undergo training that culminates in the appropriate qualifications. 					

* Polish Qualification Framework (PQF) in accordance with the Regulation of the Minister of Science and Higher Education on the characteristics of second degree learning outcomes for qualifications at the levels 6-8 within the Polish Qualifications Framework.

Conducting research for a doctorate and preparing a doctoral dissertation within the meaning of Art. 187 point 3 of the Act on Higher Education and Science of July 20, 2018, partially fulfils the implementation of all types of learning outcomes for qualifications at PQF level 8. Obtaining these outcomes is verified by the supervisor.

V

Final provisions

The education programme in Biomedical Sciences in the discipline of biological sciences at the Doctoral School of Exact and Natural Sciences enters into force on the day of the Resolution's adoption.