

**Polish–language Study Programme in Biochemistry, Biophysics,  
Molecular Biology and Biotechnology  
in the discipline of Biological Sciences  
at the Doctoral School of Exact and Natural Sciences**

**I**

**General provisions**

1. The study programme in Biochemistry, Biophysics, Molecular Biology and Biotechnology 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 study programme leads to learning outcomes for qualifications defined as level 8, according to the Polish Qualifications Framework.
3. The study programme lasts eight terms.
4. Detailed requirements and the admission criteria are defined by the University regulations as accepted by the University Senate.
5. A PhD Student submits an Individual Research Plan to the supervisor after 12 months from the day of the commencement of the study programme.
6. A number of ECTS points (European Credit Transfer and Accumulation System) allocated to the study programme is a minimum of 40 points, out of which:
  - a minimum of 30 ECTS points relates to the preparation of the PhD student for conducting research and publishing the results (courses not included in this pool are marked in the schedule with an asterisk\*)
  - a minimum of 8 ECTS points is obtained as part of the optional classes developing professional and teaching skills,
  - a minimum of 25 ECTS points is collected by the end of the 4<sup>th</sup> term,
  - a minimum of 10 ECTS points is obtained in the form of conducting classes or assisting in this process.
7. The rules on achieving learning outcomes and the manner of their evaluation are specified in the syllabuses of the individual courses.

**II**

**Occupational internship**

1. The occupational internship programme is realized in the form of conducting classes with students as well as assisting in this process.

2. Occupational internships can also take the form of conducting activities with the purpose of popularizing science.
3. The PhD student is obliged to conduct 120 hours throughout his/her entire study programme. A maximum of 40 hours out of 120 can be realized in the form of lesson observation.
4. The number of hours allocated to the internship programme must not exceed 60 hours per academic year.

### III

#### **Evaluation of study and scientific programme accomplishments**

1. The supervisor monitors the study programme implemented by the PhD student and his/her Individual Research Plan.
2. Annually, no later than by 30 September, the supervisor submits to the study programme manager written information on the implementation of the Individual Research Plan and the evaluation of the PhD student's progress.
3. The study programme manager evaluates the implementation of the study programme and research programme on the basis of the information from the supervisors and a report from the University IT system.
4. At the request of the PhD student and his/her supervisor, it is possible to change the Individual Research Plan, after the study programme manager's approval.
5. Changing a study programme, in particular changing or postponing some of the PhD student's duties to another date, requires the approval of the study programme manager.
6. The programme manager may decide to accept as part of the performance of duties (with the appropriate allocation of ECTS points) courses or classes not specified in the study programme.
7. By the end of the 4<sup>th</sup> term, the PhD student shall be subject to the mid-term evaluation before a committee appointed by the director.
8. The evaluation dates are established by the study programme manager.
9. 30 days before the scheduled committee meeting, the PhD student shall submit to the programme manager a written report on the implementation of the Individual Research Plan. The report must be approved by the supervisor before submission.
10. Members of the committee and the PhD student, in the parts to which s/he was invited, participate at the meetings of the committee conducting the mid-term evaluation.

## Schedule for the study programme in Biochemistry, Biophysics, Molecular Biology and Biotechnology

Doctoral School of Exact and Natural Sciences Study Programme: Biochemistry, Biophysics, Molecular Biology and Biotechnology						
Item	Objective	Description	PQF*	Term	ECTS	Limits
<b>OBLIGATORY ACTIVITIES AT THE DOCTORAL SCHOOL OF EXACT AND NATURAL SCIENCES(16 ECTS POINTS)</b>						
Specialistseminar		Seminar; to present the PhD student's own results against the achievements in the field, to solve research problems, to share research experience and ideas. Assessment: <b>an oral presentation and active participation in discussions</b>	P8S_WG P8S_UW P8S_UK P8S_KK	I-VIII	8	120
English language course		English classes at C1 level for the PhD students who do not hold a C1 certificate or are not graduates of master studies conducted in English. Assessment: <b>exam</b>	P8S_UK	I-II	4	60
Tutorial with the supervisor		Preparation of the individual research project, verification of the work plan, preparation of presentations on the project, editorial work on publication. Assessment: <b>approval of the work progress by the supervisor</b>	P8S_WG P8S_UW P8S_UK P8S_KK	I-VIII	4	60
<b>OPTIONAL JOINT ACTIVITIES FOR THE DOCTORAL SCHOOL OF EXACT AND NATURAL SCIENCES(MINIMUM 6 ECTS POINTS)</b>						
Doctoral School seminar		A monthly interdisciplinary seminar with lectures in English delivered by invited researchers.	P8S_WG P8S_UW P8S_UK	I-VIII	4 (1 x 4)	Minimum 6 seminars a year

	Assessment: <b>credit</b>				
Modern foreign language course	As a second foreign language Assessment: <b>exam</b>	P8S_UU	I-IV	4	60
Polish language course for foreigners	Assessment: <b>exam</b>	P8S_UU,	I-VIII	4	60
General knowledge development course	Course/s selected from a range of courses offered before a given academic year, e.g. philosophy, ethics, artificial intelligence, cosmology. Assessment: <b>exam</b>	P8S_UW P8S_KR P8S_WK	I-VIII	2 for 30 hours	30 or 60
Professional competence and 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: <b>provided in the course syllabus</b>	P8S_WK P8S_KR P8S_KO	I-VIII	2 for 30 hours	30
<b>OPTIONAL ACTIVITIES TO DEVELOP PROFESSIONAL SKILLS (MINIMUM 6 ECTS POINTS)</b>					
Lecture: Progress in biochemistry and molecular biology	Lectures delivered by the specialists in biochemistry and molecular biology (from the University Faculty of Biochemistry, Biophysics and Biotechnology) on the recent research and achievements in the fields. Assessment: <b>exam</b>	P8S_WG P8S_KK	II	2	30
English-language advanced course in biophysics	Lectures delivered by the specialists in biophysics (from the University Faculty of Biochemistry, Biophysics and Biotechnology),	P8S_WG P8S_UK P8S_KK	I	2	30

	<p>on the advanced issues of modern biophysics.</p> <p>Assessment: <b>exam</b></p>				
English-language course in bioethics	<p>Lecture and seminars on the ethical aspects of scientific research in the field of modern life sciences, in particular molecular biology and biotechnology.</p> <p>Assessment: <b>presentation</b></p>	<p>P8S_WK P8S_UK P8S_KR</p>	I-IV	2	30
Specialist lectures (including lectures of visiting professors)	<p>Lectures on the recent achievements in natural sciences, offered by specialists, including visiting professors.</p> <p>Assessment: <b>presence at the lectures</b></p>	<p>P8S_WG P8S_UK P8S_KK</p>	I-VIII	3– 1 for a 15-hour lecture	45
Courses and activities leading to attaining competences to accomplish Individual Research Plan	<p>For example, summer schools, courses completed at other universities, including foreign universities.</p> <p>Assessment: <b>according to a course syllabus</b></p>				
<b>ACTIVITIES TO DEVELOP TEACHING SKILLS</b>					
Teaching methods and IT tools in didactics and scientific work	<p>Lecture, seminars, distance learning, labs. To familiarise students with the basic teaching problems, in particular the teaching methods and techniques, the methodology of designing and evaluating tests and reports. The students learn how to operate a distance learning platform PEGAZ, as well as two programs relevant in scientific work: 1. bibliography management system Mendeley, 2. program for data analysis and processing GraphPad Prism.</p> <p>Assessment: <b>practical tasks and oral</b></p>	<p>P8S_WK P8S_UU</p>	I-IV	3	45

	<b>presentations</b>				
University didactics for natural sciences	Workshop: to prepare PhD students for conducting classes for the students of natural sciences. Assessment: <b>active participation in workshops and at the distance learning platform. Written and oral presentation of the class scenario.</b>	P8S_WK P8S_UU	I-IV	2	30
<b>OCCUPATIONAL INTERNSHIP (MINIMUM 10 ECTS POINTS)</b>					
Professional internships	Preparation for work as an academic teacher: developing communication skills and knowledge transfer skills. Assessment: <b>credit based on the opinion of the person monitoring the classes given by the PhD student.</b>	P8S_UO	I-VIII	10	120
<p>Additional training</p> <ol style="list-style-type: none"> <li>1. The PhD students entering their study programme are required to complete training in Health and Safety in Education by the end of the 2<sup>nd</sup> term of their studies, if they have not participated in such a course at the earlier stages of their education at the Jagiellonian University</li> <li>2. First Aid course completed by the end of the 2<sup>nd</sup> term</li> <li>3. The PhD students who plan research involving vertebrates are obliged to complete training to obtain appropriate licenses</li> </ol>					

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

## V Final provisions

The study programme Biochemistry, Biophysics, Molecular Biology and Biotechnology in the discipline of biological sciences at the Doctoral School of Exact and Natural Sciences enters into force on the day of the adoption of the Resolution.