Annex to the resolution no. 103/2019-2020 of the Senate of the University of Life Sciences in Lublin of 25 September 2020

EDUCATION PROGRAMME FOR THE DOCTORAL SCHOOL OF THE UNIVERSITY OF LIFE SCIENCES IN LUBLIN

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Chapter 1. General objectives of the education process at the Doctoral School of the University of Life Sciences in Lublin.

- The education programme for the Doctoral School of the University of Life Sciences in Lublin includes interdisciplinary path, common to all PhD students and specialised paths corresponding with the scientific disciplines that make up the school: Agriculture and Horticulture, Food Technology and Human Nutrition, Veterinary Medicine, Animal Science and Fishing, Mechanical Engineering, Environmental Engineering, Mining and Power Engineering, Life Sciences.
- 2. The common part of education is aimed at developing interdisciplinary perception of research problems by PhD students from different scientific disciplines as well as integrating the community of PhD students.

Chapter 2. Education programme at the Doctoral School.

§1. [Framework education programme]

- 1. The Doctoral School has a semester course system.
- 2. The curriculum of the Doctoral School includes 5 modules:
 - social module legal, ethical and economic conditions of scientific activity, English language classes
 - methodological module methodology of scientific work, statistics
 - didactic module professional training (without conducting classes, participation and unassisted conducting classes)
 - legal and dissemination module commercialisation of scientific research results, principles of preparing applications for research projects, workshops on popularisation of science
 - specialist module doctoral seminars, writing and editing scientific texts
- 3. Doctoral seminars are conducted over 8 semesters in the form of systematic meetings, which enables the development of research assumptions, regular discussions and presentations of the obtained research results.
- 4. The seminar conducted within one group can be conducted by several people to exchange knowledge, skills and scientific experience. It is allowed to combine PhD students representing different disciplines into one group.

5. English language classes are conducted on a semester basis, which guarantees a PhD student constant contact with teachers who have knowledge of specialist terminology necessary in a given filed.

§ 2 [PhD student education plan]

- 1. The study plan includes compulsory classes.
- 2. The framework education plan for PhD students at the Doctoral School of the University of Life Sciences in Lublin is presented in table 1.

Table 1. Framework education plan for PhD students at the Doctoral School of the University of Life Sciences in Lublin.

| No. | Name of the subject/ course | W | Ćw. | Total | E/Z |
|------------|---|----|-----|-------|-----|
| Semester 1 | | | | | |
| 1. | English language classes | | 15 | 15 | Ζ |
| 2. | Methodology of scientific work | 15 | | 15 | Ζ |
| 3. | Legal, ethical and economic conditions of scientific activity | 15 | | 15 | Z |
| 4. | Doctoral seminar I | | 15 | 15 | Z |
| 5. | Professional training (without conducting classes, participation) | | 30 | 30 | Z |
| Total | | 30 | 60 | 90 | |
| Semest | er 2 | 1 | | | |
| 1. | English language classes | | 15 | 15 | Ζ |
| 2. | Writing and editing scientific texts | | 15 | 15 | Ζ |
| 3. | Professional training | | 30 | 30 | Ζ |
| 4. | Statistics | | 15 | 15 | Ζ |
| 5. | Doctoral seminar II | | 15 | 15 | Ζ |
| Total | | | 90 | 90 | |
| Semest | er 3 | | | | |
| 1. | English language classes | | 15 | 15 | Ζ |
| 2. | Preparation of applications for research projects | | 15 | 15 | |
| 3. | Professional training | | 30 | 30 | Z |
| 4. | Doctoral seminar III | | 15 | 15 | Z |

| Total | | | 75 | 75 | |
|-----------------------|--|----|-----|-----|---|
| Semest | er 4 | I | | • | |
| 1. | English language classes | | 15 | 15 | Z |
| 2. | Commercialisation of scientific research results | 15 | | 15 | |
| 3. | Professional training | | 30 | 30 | Ζ |
| 4. | Doctoral seminar IV | | 15 | 15 | Z |
| Total | | 15 | 60 | 75 | |
| Semest | er 5 | | • | | |
| 1. | English language classes | | 15 | 15 | Z |
| 2. | Professional training | | 30 | 30 | Z |
| 3. | Doctoral seminar V | | 15 | 15 | Z |
| Total | | | 60 | 60 | |
| Semest | er 6 | I | | • | |
| 1. | English language classes | | 15 | 15 | Z |
| 2. | Professional training | | 30 | 30 | Z |
| 3. | Doctoral seminar VI | | 15 | 15 | Ζ |
| Total | | | 60 | 60 | |
| Semester 7 | | | | | |
| 1. | Workshops on popularisation of science | | 15 | 15 | Z |
| 2. | Doctoral seminar VII | | 15 | 15 | Z |
| 3. | Professional training | | 30 | 30 | Z |
| Total | | | 60 | 60 | |
| Semest | er 8 | | | | |
| 1. | Doctoral seminar VIII | | 15 | 15 | Ζ |
| 2. | Professional training | | 30 | 30 | Ζ |
| Total | | | 45 | 45 | |
| In total / Altogether | | 45 | 510 | 555 | |

W - lectures, Ćw - classes, E - exam, Z - credit

Chapter 3. Learning outcomes at the Doctoral School of the University of Life Sciences in Lublin

§ 3. [Learning outcomes related to specific categories and domains]

1. Table no 2 presents learning outcomes related to specific categories and domains at the Doctoral School of the University of Life Sciences in Lublin.

Table 2. Learning outcomes related to specific categories and domains (pursuant to Regulation of the Minister of Science and Higher Education of 14 November 2018 on characteristics of second-cycle studies learning outcomes for qualifications at levels 6-8 of Polish Qualification Framework – Level 8 PRK)

| Learning outcome symbol | Learning outcomes related to specific categories and domains | Reference to characteristics of second cycle | | | |
|-------------------------------|---|--|--|--|--|
| Symbol | | PRK for level 8 | | | |
| | Knowledge: knows and understands | | | | |
| SD_W01 | to the extent allowing the revision of the existing | P8S_WG | | | |
| | paradigms in the field/discipline – world | | | | |
| | achievements, covering theoretical foundations as | | | | |
| | well as general and specific issues | | | | |
| SD_W02 | major developmental trends in the field/discipline, in | P8S_WG | | | |
| | which education takes place | | | | |
| SD_W03 | methodology of scientific research in the P8S_WG | | | | |
| | field/discipline of the conducted research including | | | | |
| | programmes for data analysis | | | | |
| SD_W04 | applicable principles for dissemination of scientific P8S_WG | | | | |
| | research results in the field/discipline as well as in | | | | |
| | open access mode | | | | |
| SD_W05 | fundamental dilemmas of modern civilisation | P8S_WK | | | |
| SD_W06 | economic, legal, ethical and other important | P8S_WK | | | |
| | conditions for scientific activity | | | | |
| SD_W07 | basic principles of knowledge transfer to the | P8S_WK | | | |
| | economic and social sphere as well as | | | | |
| | commercialisation of scientific research results | | | | |
| Abilities: can | | | | | |

| SD_U01 | use knowledge from different fields of science to | P8S_UW | | |
|----------------------------|--|--------|--|--|
| | creatively identify, formulate and apply innovative | | | |
| | solutions to assumed research problems | | | |
| SD_U02 | define the purpose and subject of scientific research, | P8S_UW | | |
| | formulate a research hypothesis, develop innovative | | | |
| | research methods and draw conclusions based on | | | |
| | scientific research results | | | |
| SD_U03 | critically assess the results of scientific research and | P8S_UW | | |
| | expert activities and their contribution to the | | | |
| | development of knowledge of the field/discipline | | | |
| SD_U04 | transfer the results of scientific activity to the | P8S_UW | | |
| | economic and social sphere | | | |
| SD_U05 | skilfully select and use communication techniques | P8S_UK | | |
| | and actively participate in the international scientific | | | |
| | community | | | |
| SD_U06 | disseminate the results of scientific activities in the | P8S_UK | | |
| | popular-scientific form as well as in the popular form | | | |
| SD_U07 | initiate discussion on science and participate in | P8S_UK | | |
| | scientific discourse | | | |
| SD_U08 | use the modern language in the field/discipline at B2 | P8S_UK | | |
| | level of the Common European Framework of | | | |
| | Reference for Languages, present the results of | | | |
| | scientific research and conduct a scientific discussion | | | |
| | in the international community | | | |
| SD_U09 | plan individual as well as team research and creative | P8S_UO | | |
| | ventures also in the international community | | | |
| SD_U10 | plan and pursue personal development as well as the | P8S_UU | | |
| | development of others | | | |
| SD_U11 | plan classes and groups of classes making use of | P8S_UU | | |
| | didactic skills and professional qualifications related | | | |
| | to the method and technique of conducting didactic | | | |
| | classes | | | |
| Social skills: is ready to | | | | |

| SD_K01 | critically evaluate the achievements of the | P8S_KK | | | | |
|--------|---|--|--|--|--|--|
| | represented field/discipline | | | | | |
| SD_K02 | critically evaluate his/her own contribution to the | critically evaluate his/her own contribution to the P8S_KK | | | | |
| | development of the discipline he/she represents | | | | | |
| SD_K03 | recognise the importance of knowledge in solving | P8S_KK | | | | |
| | cognitive and practical problems, characteristic for | | | | | |
| | the area of conducted research (field/discipline) | | | | | |
| SD_K04 | perform professional roles, including respecting the | P8S_KO | | | | |
| | code of professional conduct and improving the | | | | | |
| | knowledge related to the profession | | | | | |
| SD_K05 | maintain interpersonal relationships and influence | P8S_KO | | | | |
| | correct social attitudes | | | | | |
| SD_K06 | initiate actions in the public interest | P8S_KO | | | | |
| SD_K07 | think and act in an entrepreneurial and creative way | P8S_KO | | | | |
| SD_K08 | maintain and develop the ethos of scientific | P8S_KR | | | | |
| | community and conduct independent scientific | | | | | |
| | activity | | | | | |
| SD_K09 | respect the principles of public ownership of | P8S_KR | | | | |
| | scientific activity results and intellectual property | | | | | |
| | protection | | | | | |

§ 4. [Learning outcomes in relation to the modular learning system]

1. Table no 3 presents learning outcomes in relation to modular learning system at the Doctoral School of the University of Life Sciences in Lublin.

Table 3. Learning outcomes at the Doctoral School are presented and divided into knowledge, abilities and social skills for each module separately. The outcomes were developed from the perspective of a PhD student, who was granted a doctoral degree (pursuant to Regulation of the Minister of Science and Higher Education of 14 November 2018 on characteristics of second-cycle studies learning outcomes for qualifications at levels 6-8 of Polish Qualification Framework – Level 8 PRK)

| Module | Graduate of the Doctoral School of the University of Life Sciences in Lublin | | |
|----------------|--|--|---|
| | Knowledge knows and understands: | Abilities can: | Social skills is ready to: |
| Social module | SD_W05 | SD_U05 | SD_K04 |
| | fundamental dilemmas of modern | skilfully select and use communication | perform professional roles, including |
| | civilization | techniques and actively participate in the | respecting the code of professional |
| | SD_W06 | international scientific community | conduct and improving the knowledge |
| | economic, legal, ethical and other | SD_U07 | related to the profession |
| | important conditions for scientific | initiate discussion on science and | SD_K05 |
| | SD W07 | sp tion | maintain interpersonal relationships |
| | basic principles of knowledge transfer to | SD_000 use the modern language in the | SD KAG |
| | the economic and social sphere as well | field/discipline at B2 level of CEERL | initiate actions in the public interest |
| | as commercialization of scientific | SD U10 | initiate actions in the public interest |
| | research results | plan and pursue personal development as | |
| | | well as the development of others | |
| Methodological | SD_W02 | SD_U01 | SD_K01 |
| modulo | major developmental trends in the | use knowledge from different fields of | critically evaluate the achievements of |
| mouule | field/discipline, in which education | science to creatively identify, formulate | the represented field/discipline |
| | takes place | and apply innovative solutions of | SD_K08 |
| | SD_W03 | assumed research problems | maintain and develop the ethos of |
| | methodology of scientific research in the | SD_U02 | scientific community and conduct |
| | field/discipline of the conducted | define the purpose and subject of | independent scientific research |
| | research including programmes for data | scientific research, formulate a research | |
| | analysis | hypothesis, develop innovative research | |

| | | methods and draw conclusions based on scientific research results SD_U03 critically assess the results of scientific research and expert activities and their contribution to the development of knowledge of the field/discipline | |
|---------------|--|---|--|
| Didactic | SD_W01 | SD_U11 | SD_K03 |
| module | to the extent allowing the revision of the existing paradigms in the field/discipline – world achievements, covering theoretical foundations as well as general and specific issues SD_W02 major developmental trends in the field/discipline, in which education takes place | plan classes or groups of classes making use of didactic skills and professional qualifications related to the method and technique of conducting didactic classes | recognise the importance of knowledge in solving cognitive and practical problems, characteristic for the area of conducted research (field/discipline) SD_K02 critically evaluate his/her own contribution to the development of the discipline he/she represents SD_K09 respect the principles of public ownership of scientific activity results and intellectual property protection |
| Legal and | SD_W04 | SD_U04 | SD_K08 |
| dissemination | applicable principles for dissemination | transfer the results of scientific activity to | maintain and develop the ethos of |
| module | field/discipline as well as in open access | SD U06 | independent scientific activity |
| mouule | mode | disseminate the results of scientific | SD_K09 |
| | SD_W06 | activities in the popular-scientific form as | respect the principles of public |
| | economic, legal, ethical and other | well as in the popular form | ownership of scientific activity results |
| | important conditions for scientific | | and intellectual property protection |
| | SD_W07 | | |

| | basic principles of knowledge transfer to the economic and social sphere as well as commercialisation of scientific research results | | |
|----------------------|---|---|---|
| Specialist | SD_W01 | SD_U09 | SD_K07 |
| module | to the extent allowing the revision of the existing paradigms in the field/discipline | plan individual as well as team research and creative ventures also in the | think and act in an entrepreneurial and creative way |
| (connected | - world achievements, covering | international community | SD_K02 |
| with the discipline) | theoretical foundations as well as general and specific issues | | critically evaluate his/her own contribution to the development of the discipline he/she represents |
| uiscipiine) | | | discipline ne/sne represents |

§ 5. [Learning outcomes coverage grid in relation to education programme]

1. Table no.4 presents learning outcomes coverage grid in relation to the education programme at the Doctoral School of the University of Life Sciences in Lublin.

Table 4. learning outcomes coverage grid in relation to the educational programme at the Doctoral School of the University of Life Sciences in Lublin (pursuant to Regulation of the Minister of Science and Higher Education of 14 November 2018 on characteristics of second-cycle studies learning outcomes at levels 6-8 of Polish Qualification Framework – Level 8 PRK)

| No. | Name of the subject/course | Qualification | Framework / |
|-------|---|----------------|-------------|
| | | learning outco | mes |
| Semes | ster 1 | | |
| 1. | English language classes | P8S_UK | |
| 2. | Methodology of scientific work | P8S_WG | P8S_UW |
| 3. | Legal, ethical and economic conditions of scientific activity | P8S_WK | |
| 4. | Doctoral seminar I | P8S_KK | |
| 5. | Professional training (without conducting classes, participation) | P8S_KO | |
| Total | | | |
| Semes | ster 2 | | |
| 1. | English language classes | P8S_UK | |
| 2. | Writing and editing scientific texts | P8S_KR | |
| 3. | Professional training | P8S_KO | |
| 4. | Statistics | P8S_UW | |
| 5. | Doctoral seminar II | P8S_KK | |
| Total | | | |
| Semes | ster 3 | | |
| 1. | English language classes | P8S_UK | |
| 2. | Preparation of applications for research projects | P8S_WK | P8S_UO |

| 3. | Professional training | P8S_KO | | |
|-------|--|--------|--------|--|
| 4. | Doctoral seminar III | P8S_KK | | |
| Total | | | | |
| Semes | ster 4 | | | |
| 1. | English language classes | P8S_UK | | |
| 2. | Commercialisation of scientific research results | P8S_KO | | |
| 3. | Professional training | P8S_KO | | |
| 4. | Doctoral seminar IV | P8S_KK | | |
| Total | | | | |
| Semes | iter 5 | • | | |
| 1. | English language classes | P8S_UK | | |
| 2. | Professional training | P8S_KO | | |
| 3. | Doctoral seminar V | P8S_KK | | |
| Total | Total | | | |
| Semes | ster 6 | | | |
| 1. | English language classes | P8S_UK | | |
| 2. | Professional training | P8S_KO | P8S_UU | |
| 3 | Doctoral seminar VI | P8S_KK | | |
| Total | | | | |
| Semes | ster 7 | | | |
| 1. | Workshops on popularisation of science | P8S_KO | | |
| 2. | Doctoral seminar VII | P8S_KK | | |
| 3. | Professional training | P8S_KO | | |
| Total | | | | |
| Semes | ster 8 | • | • | |
| 1. | Doctoral seminar VIII | P8S_KK | | |
| 2. | Professional training | P8S_KO | | |

§ 6. [Principles of crediting]

 A PhD student is obliged to implement the education programme for the Doctoral School in accordance with the principles outlined in §2. 2. At the end of the semester (determined in accordance with the organisation of the academic year at the University of Life Sciences in Lublin), during the course of study a PhD student is obliged to complete the curriculum and to submit the credit card at the office of the Doctoral School.

| Assessment in words | Numerical assessment |
|---------------------|----------------------|
| Very good | 5.0 |
| Good plus | 4.5 |
| Good | 4.0 |
| Satisfactory plus | 3.5 |
| Satisfactory | 3.0 |
| Unsatisfactory | 2.0 |

3. Courses/subjects are credited with a grade according to the following grading scale:

- 4. At the end of each academic year (by 30 September) a PhD student submits to the Director of the Doctoral School a report on his/her progress made in the preparation of the doctoral dissertation, together with the supervisor's opinion. A PhD student prepares the report according to a uniform template, which is Annex no. 1 to the education programme.
- 5. At the end of the first year of studies (at the latest by 30 September) a PhD student submits to the Director of the Doctoral School the Individual Research Plan (IPB), reviewed by the supervisor(s) ,the chairperson of the Discipline Council and the Scientific Council for the Doctoral School.
- Conditions for crediting the subsequent years of studies resulting from the implementation of the programme for the Doctoral School and the Individual Research Plan
 - a) The condition for crediting the first year of education is obtaining positive grades in courses outlined in the curriculum and submitting the Individual Research Plan (IPB), (which includes: purpose of the research, research hypothesis, methodology of research, review of the world's literature on undertaken research topics and at least 3-month-international academic training).

In subsequent years the IPB is subject to the review of scientific supervisor, the chairperson of the Discipline Council and the Scientific Council for the Doctoral

School, and is then submitted to the Director of the Doctoral School by 30 September.

- **b**) The condition for crediting the second year of education is obtaining a positive result of the mid-term evaluation: obtaining positive grades in courses outlined in the curriculum, implementing the schedule presented in IPB, preparing and sending a scientific publication/article to the reviewing journal from the JCR register, for which the PhD student is the first or corresponding author, preparing and submitting an application for financing research from external sources.
- c) The condition for crediting the third year of education is obtaining positive grades in courses outlined in the curriculum, implementing the schedule presented in IPB together with preparing and sending at least the second scientific publication / article to the reviewing journal from the JCR register.
- d) The condition for crediting the fourth year of education is implementing the education programme for the Doctoral School together with obtaining positive grades in courses implemented during the course of studies and submitting the doctoral dissertation by 30 September.
- 7. Reviewing scientific progress of PhD students, implementing the education programme for the Doctoral School by chairperson of the Discipline Council and the Scientific Council for the Doctoral School, is aimed at controlling the correct and timely implementation of IPB, and above all substantive support for a young scientist.
- 8. An additional element of a PhD student's evaluation is his/her dissemination and implementation activity (popular science publications and knowledge dissemination publications, participation in conferences, lectures, participation in scientific festivals), trainings and scientific internships as well as applying for research projects and their implementation.

§ 7. [Characteristics of the modules and objectives pursued in the area of individual classes outlined in the education programme]

Social module – courses implemented in this module are aimed at enabling PhD students to develop the ability to speak freely and present research results in a professional manner, to acquire the ability to establish interpersonal contacts easily in both national and international scientific community, to acquire the skills of self-presentation – this will be a useful skill when conducting classes with students.

- 2. Methodological module contains a substantially selected set of classes, during which PhD students will acquire the skills of proper selection and application of research methods. The basic principle for the preparation of high quality scientific studies is the knowledge and the ability to correctly apply methods characteristic for a specific research area in accordance with the presented field/discipline.
- 3. **Didactic module** within the framework of this module a PhD student will learn the full range of scientific and didactic activities and after completing the courses in this module he/she should be well prepared to didactic activities. In the education programme, a PhD student will become acquainted with the methodology of academic teaching and will also undergo professional training first as an observer of experienced research and teaching staff members (participating in classes) and next conducting the teaching activities with students on his/her own, in accordance with the study plan.
- 4. Legal and dissemination module the aim of this module will be to present the relationship between the scientific and didactic work and the achievements of the outstanding domestic and foreign scientists to PhD students. In order for the PhD students to be able to benefit in this area from the scientific achievements of both national and international scope, in a manner consistent with ethical and legal standards within this module, they will have the opportunity to learn about the issues related to the protection of intellectual property and the commercialisation of scientific research results. At the same time ,since scientific work is also about applying for research projects, this module includes a course where PhD students will have the opportunity to learn the principles of preparing applications for research projects, as well as to realise issues related to the popularisation of science.
- 5. **Specialist module (in the discipline)** will be implemented at each stage of education at the Doctoral School by participating in seminars, trainings, scientific internships, as well as through the implementation of IPB in selected disciplines.