



APPROVED

Rector
of Lviv Polytechnic
National University

Bobalo Yu.Ya.

« 25 » 05 2021

EDUCATIONAL AND SCIENTIFIC PROGRAMME

of the third (educational and scientific) level of higher education
in specialty 015 *Vocational Education (by subject specialization)*
Field of knowledge 01 *Education/Pedagogy*

Qualification:

Doctor of Philosophy in specialty *Vocational Education (by subject specialization)*

Reviewed and Approved by
Academic Board of the
University
(Protocol № 74
dated «25» 05 2021

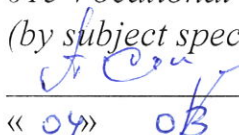
LETTER of AGREEMENT
of the educational and scientific programme

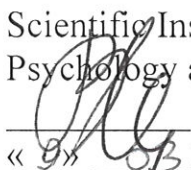
Level of higher education
Field of knowledge
Specialty

third (educational-scientific)
01 *Education /Pedagogy*
015 *Vocational Education (by
subject specialization)*

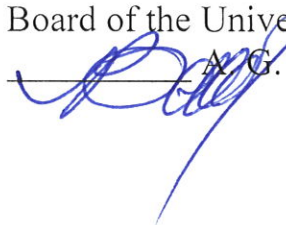
APPROVED

Scientific and Methodological
Commission of the specialty 015
Vocational Education
(by subject specialization)
Protocol № 2
dated «04» 03 2021.

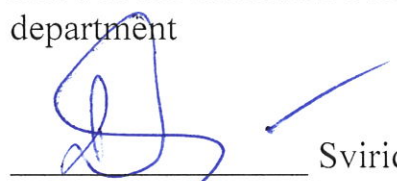
Head of SMC of the specialty
015 Vocational Education
(by subject specialization),
 P.I. Sikorskyi
«04» 03 2021.

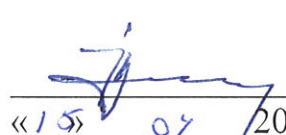
Director of the Educational and
Scientific Institute of Law and
Psychology and Innovative Education
 V. L. Ortynskyi
«9» 03 2021.


RECOMMENDED

Scientific-Methodological Board of the
University
Protocol № 56
dated «13» 05 2021.
Head of Scientific-Methodological
Board of the University
 A.G. Zagorodnii

AGREED

Head of the Scientific-Methodological
department

Sviridov V. M.
«12» 05 2021.

Vice Rector for Scientific Research
 Demydov I. V.
«15» 07 2021.

Vice Rector for Scientific-Pedagogical
Work
 Davudchak O. R.
«12» 05 2021.

Designed by the project group in specialty 015 Professional Education (by specialization):

Head of the project group (Guarantor of educational-scientific programme):
Kryshtanovych Myroslav Frankovych – Doctor of Public Administration, Professor of the Department of Pedagogy and Innovative Education

Members:

- Kozlovskiy Yuriy Mykhailovych - Doctor of Pedagogical Sciences, Professor, Head of the Department of Pedagogy and Innovative Education
- Mukan Natalya Vasylivna – Doctor of Pedagogical Sciences, Professor of the Department of Pedagogy and Innovative Education
- Sikorskyi Petro Ivanovych – Doctor of Pedagogical Sciences, Professor of the Department of Pedagogy and Innovative Education
- Gelesh Anna Valentynivna – Candidate of Historical Sciences, Assistant Professor of the Department of Pedagogy and Innovative Education
- Dolnikova Lubov Vasylivna – Candidate of Pedagogical Sciences, Assistant Professor of the Department of Pedagogy and Innovative Education
- Stechkevych Oleh Orestovych – Candidate of Pedagogical Sciences, senior scientific worker, Assistant Professor of the Department of Pedagogy and Innovative Education
- Pukalo Mariia Ihorivna – Doctor of Philosophy, deputy director of Saint Ivan Bosco youth educational center
- Denkovych Natalia Andriivna - postgraduate student, specialty 015 Vocational Education (by subject specialization).

Head of the project group (Guarantor of educational-scientific programme):
Doctor of Public Administration, Professor Kryshtanovych Myroslav Frankovych

Approved and became effective by the Decree of the Rector of Lviv Polytechnic National University dated « 1 » 06 2021 № 325-1-10

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1. EDUCATIONAL COMPONENT

Profile of the programme of the Doctor of Philosophy in the field of knowledge

01 *Educatio/ Pedagogy* in specialty 015 *Vocational Education (by subject specialization)*

1 – General information	
Full title of higher educational institution and structural unit	Lviv Polytechnic National University, Educational and Scientific Institute of Law and Psychology and Innovative Education, Department of Pedagogy and Innovative Education
Full title of the qualification in the original language	Doctor of Philosophy in Vocational Education (by subject specialization) Specialty
The official title of the educational programme	Vocational Education (by subject specialization)
Type of diploma and scope of the educational programme	Doctor of Philosophy, single, 43 ECTS credits of the educational component of the educational and scientific programme, term of the educational component of the educational and scientific programme – 2 years
Availability of accreditation	Accredited (Decision of NA dated 17.11.2020, protocol No. 22 (39))
Cycle/level	NRC of Ukraine - level 8, FQ-EHEA - the third cycle, EQF-LLL – level 8
Prerequisites	Level of higher education “Master”
Language(s)	Ukrainian
Basic concepts and their definitions	The educational and scientific programme uses the basic concepts and their definitions in accordance with the Law of Ukraine “On Higher Education” dated 01.07.2014 №1556-VII with amendments and additions, the Law of Ukraine “On Higher Education” dated 05.09.2017 №2145-VIII with amendments and additions, the Law of Ukraine “On scientific and scientific-technical activities” dated 26.11.2015 № 848-VIII with amendments and additions, the Procedure for training applicants for higher education for the degree of Doctor of Philosophy and Doctor of Science in higher educational institutions (scientific institutions), approved by the Resolution of the Cabinet of Ministers dated 23.03.2016. № 261 with amendments and additions, the procedure for awarding the degree of Doctor of Philosophy, approved by the Resolution of the Cabinet of Ministers of Ukraine dated 06.03.2019 №167, Guidelines for the development of standards of higher education, approved by the Order of the Ministry of Education and Science of Ukraine dated 01.06.2017 №600 with amendments and additions, Provisions on the accreditation of educational programs, according to which higher education applicants are trained, approved by the order of the Ministry of Education and Science of Ukraine dated July 11, 2019 No. 977.
2 – Purpose of the educational and scientific programme	
	To train highly qualified professional in the field of <i>Education/Pedagogy</i> in the specialty <i>Vocational Education (by subject specialization)</i> , develop philosophical and language competencies, necessary, form universal skills of a researcher, sufficient for conducting and successful completion of scientific research and further professional scientific activity.
3 – Characteristics of the educational and scientific programme	

Subject area (field of knowledge, specialty)	Field of knowledge 01 <i>Education/Pedagogy</i> , specialty 015 <i>Vocational Education (by subject specialization)</i>
Orientation of the educational and scientific programme	The educational and scientific programme is based on the methodological principles of the educational field and the results of modern scientific research in the field of innovative development of the theory and practice of education. Aimed at the development of theoretical-methodological and methodological-applied base of education and focuses on current specializations with emphasis on the latest trends in education, which deepens the professional scientific outlook and provides a basis for scientific and pedagogical research and further scientific and pedagogical activity.
The main focus educational and scientific programme	The educational and scientific programme provides for the development of special knowledge and training in the field of vocational education, necessary for conducting scientific research and further scientific and pedagogical activities. Key words: education, vocational education, educational activity, methods of vocational training, forms of training organization
Peculiarities of the educational and scientific programme	The educational and scientific programme covers a wide range of modern innovative vectors of the development of the theory and practice of vocational education, which forms an updated theoretical-practical base for conducting scientific research and ensures the formation of critical and creative thinking in the field of general pedagogical training. Educational and scientific divisions of the university act as experimental sites for specializations in vocational education and potential employers of graduates. The training of doctors of philosophy involves their familiarization with the conduct of scientific and pedagogical research in the specialty “Vocational education (by subject specialization)” using modern information and communication technologies.
4 – Eligibility of graduates of the educational, scientific programme for employment and further training	
Eligibility for employment	Employment in public and private educational institutions of different levels of the education system, scientific and research institutions, education management bodies, public educational organizations, other enterprises, educational centres.
Further training	The opportunity to continue education to get the scientific degree of Doctor of Sciences in the specialty 015 “Vocational education (by subject specialization) or other related (adjacent) specialties in the field of knowledge 01 Education/Pedagogy.
5 – Teaching and assessment	
Teaching and studying	Combination of lectures and practical classes, pedagogical workshop, consultation with the supervisor, scientific and pedagogical community and independent scientific and educational work. Educational discussion, video method, game method, situational method; methods of organization and self-organization of educational and cognitive activities: methods of stimulating and motivating learning, methods of control and self-control in learning, binary teaching methods and innovative methods using ICT in the context of communicative, contextual and competence approaches.

Assessment	Formative (oral individual questioning; frontal standardized test questioning; assessment of the students' activity in the process of listening to lectures, performing practical tasks, participating in discussions, solving problem and situational tasks, adding previous answers) and final (exams, credit tests).
6 – Programme competencies	
Integral competency (INT)	The ability to produce innovative scientific ideas, master the methodology of scientific and pedagogical activities, solve complex problems in the process of innovative research and professional activities, conduct original research in the field of education, pedagogy at the international and national levels.
General competencies (GC)	<p>GC1. Ability to master general scientific (philosophical) competencies aimed at forming a systematic scientific worldview, professional ethics and general cultural outlook; application of modern information technologies in scientific activity.</p> <p>GC2. Ability to present and discuss the results of own scientific work in a foreign language orally and in writing, as well as understanding foreign-language scientific texts in the specialty of educational, pedagogical sciences</p> <p>GC3. Ability to use universal skills of the researcher, and also to organize and carry out educational employment using modern information technologies.</p> <p>GC4. Ability to demonstrate universal skills of a researcher, in particular to present the results of own research in Ukrainian, manage research projects and / or make proposals for research funding, registration of intellectual property rights.</p> <p>GC5. Ability to continuous professional development based on critical self-assessment in order to self-improve and ensure the quality of education.</p> <p>GC6. Ability to demonstrate innovation, a high degree of independence, academic and professional integrity, constant commitment to the development of new ideas or processes in the advanced contexts of professional and scientific activities.</p>
Special (professional) competencies (PC)	<p>PC1. Ability to plan and conduct experimental pedagogical research, model, implement and evaluate the educational process, use mathematical methods to verify the reliability of the results obtained, adequately evaluate and forecast the results of scientific and pedagogical research in order to ensure the planned level of personal and professional development of the students.</p> <p>PC2. Ability to choose and effectively use innovative approaches to the organization of the educational process in order to ensure the expected result regarding the level of personal and professional development of the students of education, to develop and implement new educational programs and pedagogical technologies in professional education.</p> <p>PC3. Ability to plan and solve the tasks of one's own professional and personal development, to adapt to new situations, and to make informed decisions in accordance with the requirements, realizing the possibilities of professional mobility.</p> <p>PC4. Awareness of the cognitive aspects of pedagogical interaction, the essence of the emotional organization of its construction, the ability to realize the need for professional development, to fully manifest individual potential through the professional application of pedagogical techniques, professional abilities, and the humanistic orientation of the teacher's personality.</p> <p>PC5. Ability to design the content of training, develop and use didactic means of methodical support of training in professional education institutions, including on the basis of pedagogical integrology.</p>

	<p>PC6. Ability to analyze modern domestic and foreign pedagogical concepts of training specialists in various fields, methods of teaching pedagogical and special disciplines, demonstrate the ability to build educational interaction based on deep knowledge of patterns, principles and methods of education.</p> <p>PC7. Ability to substantiate the impact of internationalization processes on the international competitiveness of vocational education institutions as active agents of the world market of educational services, to analyze theoretical and implement practical approaches to the integration of domestic vocational education institutions into the global educational environment and deepening of international cooperation in the field of education.</p> <p>PC8. Ability to analyze and creatively use the results of modern scientific research in the organization and provision of the educational process.</p> <p>PC9. Ability to choose and apply modern information and communication tools and technologies to ensure effective scientific and professional communications, organization of educational and scientific activities.</p> <p>PC10. Ability to initiate, organize and manage educational projects, to apply creative abilities to the formation of fundamentally new ideas in the field of educational management, to critically evaluate the results of activities and to justify the decisions made, to possess the methods of psycho-pedagogy of management to manage the subjects of the educational process and to implement leadership functions.</p>
7 – Programme outcomes of studying	
Knowledge (KN)	<p>KN1. Knowledge of scientific concepts and methodology in the field of professional education, modelling and implementation of scientific and pedagogical research, effective use of innovative approaches to the development of educational programs and pedagogical technologies in professional education.</p> <p>KN2. Knowledge of modern domestic and foreign concepts of specialist training, methods of teaching pedagogical and special disciplines, development of methodical support for the educational process.</p> <p>KN3. Knowledge of the state language and at least one foreign language at a level sufficient for use in scientific and pedagogical activities.</p> <p>KN4. Knowledge of the organization and management of educational projects, the development of creative abilities of students, as well as the professional development and mobility of scientific and pedagogical workers.</p>
Abilities (AB)	<p>AB1. To apply specialized knowledge, strategies and techniques needed to solve significant problems in the field of professional education, science and innovation on the basis of expansion and reassessment of existing knowledge and professional practice and their presentation in Ukrainian and foreign languages.</p> <p>AB2. To carry out planning, implementation and adjustment of the consistent process of thorough research in compliance with proper academic integrity.</p> <p>AB3. To critically analyze, evaluate and synthesize new and complex ideas.</p> <p>AB4. To demonstrate skills of independent research planning, organization and fulfilment, flexible thinking, openness to new knowledge, to evaluate the results of autonomous work and be responsible for personal professional development and training of others.</p> <p>AB5. To develop innovative projects in the field of education, to</p>

	<p>manage them and search for partners to implement, develop leadership potential.</p> <p>AB6. To plan, organize, monitor and evaluate scientific and pedagogical activities in educational institutions based on the use of modern assets of pedagogical science and ICT with due observance of academic integrity.</p>
Communication (COM)	<p>COM1. To communicate freely on issues related to the field of scientific and expert knowledge, with colleagues and the scientific community, society in general in Ukrainian and a foreign language.</p> <p>COM2. To use academic Ukrainian and foreign language in professional activity and research.</p>
Autonomy and responsibility A&R	<p>A&R1. Demonstration of significant authority, innovativeness, high level of independence, academic and professional integrity, ongoing commitment to the development of new ideas or processes in advanced professional and scientific contexts.</p> <p>A&R2. Self-development and self-improvement throughout life.</p>

8 – Resource provision of the programme implementation

Specific characteristics of staffing	Scientific and pedagogical workers involved in the implementation of the educational and scientific program 015 Vocational Education (by subject specialization) have a degree and academic, approved level of academic and professional qualification.
Specific characteristics of material and technical supplying	Material and technical supplying of the educational process meets the requirements and needs for lectures and practical classes, including in remote mode. There are local networks with Internet access and the necessary social and domestic infrastructure.
Specific characteristics of information and methodological supplying	Electronic educational and methodical complexes of disciplines are placed in the virtual educational environment of Lviv Polytechnic National University. The availability of teaching materials for compulsory and optional disciplines is 100 percent. Office and application packages are used.

9 – Academic mobility

National credit mobility	Based on bilateral agreements between Lviv Polytechnic National University and Ukrainian universities/scientific institutions.
International credit mobility	Based on bilateral agreements between Lviv Polytechnic National University and higher educational institution of partner countries.
Training of foreign postgraduate students	Possible, after completing the Ukrainian Language course

**Distribution of the content of the educational programme
by groups of components and cycles of training**

№	Cycle of training	Study load of the postgraduate students (credits / %)		
		Compulsory educational components	Optional educational components	Total number for the entire period of study
1.	Cycle of disciplines, forming general scientific competencies and universal skills of the researcher	21/49	3/7	24/56
2.	Cycle of disciplines, forming professional competences	10/23	6/14	16/37
3.	Cycle of disciplines of free choice of a postgraduate student	-	3/7	3/7
Total number for the entire period of study		31/72	12/28	43/100

List of components of the educational and scientific programme

E/D Code	Components of the educational and scientific programme	Number of credits	Final assessment form
Compulsory educational components			
<i>Cycle of disciplines, forming general scientific competencies and universal skills of the researcher</i>			
CC1.1.	Philosophy and methodology of science	3	exam
CC1.2.	Academic English, part 1	4	credit test
CC1.3.	Academic English, part 2	4	exam
CC1.4.	Vocational Pedagogy	3	credit test
CC1.5.	Academic entrepreneurship	4	credit test
CC1.6.	Pedagogic practicum	3	credit test
Total by the course:		21	
<i>Cycle of disciplines, forming professional competencies</i>			
CC2.1.	Development of the dissertation project	4	exam
CC2.2.	Research seminar "Vocational Education": theory and innovative technologies	3	credit test
CC2.3.	Actual problems of vocational education	3	credit test
Total by the course:		10	

E/D Code	Components of the educational and scientific programme	Number of credits	Final assessment form
Optional educational components			
<i>Cycle of disciplines, forming general scientific competencies and universal skills of the researcher</i>			
OC1.1.	Business English	3	credit test
OC1.2.	Psychology of creativity and invention	3	credit test
OC1.3.	Management of scientific projects	3	credit test
OC1.4.	Technology of preparation of grant application and patent right	3	credit test
OC1.5.	Rhetoric	3	credit test
OC1.6.	Modern invention in research activities	3	credit test
OC1.7.	Open scientific practices	3	credit test
OC1.8.	Academic integrity and quality of education	3	credit test
OC1.9.	Methodology of preparation of scientific publications	3	credit test
OC1.10.	Quality of higher education (formation of internal quality assurance systems)	3	credit test
Total by the course:		3	
<i>2.2. Cycle of disciplines, forming professional competencies *</i>			
OC2.1.	Internationalization of vocational education	3	exam
OC2.2.	Innovative pedagogical systems of the 21st century	3	exam
OC2.3.	Information technologies in education and science	3	exam
OC2.4.	Professional development and mobility of a modern vocational education teacher	3	exam
OC2.5.	Pedagogical excellence of a modern teacher	3	exam
OC2.6.	Didactics of vocational training	3	exam
OC2.7.	Professional education in comparative discourse	3	exam
OC2.8.	Pedagogical experiment and methods of mathematical statistics	3	exam
OC2.9.	Pedagogical innovation in research activities	3	exam
OC2.10.	Management and leadership in vocational education	3	exam
Total by the course:		6	
<i>2.3. Disciplines of free choice of a postgraduate student **</i>			
OC3.1.	Discipline of free choice of a postgraduate student**	3	
Total by the course:		3	
TOTAL		43	

Note:

* - among optional disciplines, forming professional competencies, a postgraduate student chooses two disciplines;

** - a postgraduate student has a possibility to choose disciplines, which are taught in Lviv Polytechnic National University or other national (foreign) higher educational institutions at all levels within academic mobility.

4. Matrix of correspondence of programme competencies to educational programme components

	CC1.1	CC1.2	CC1.3	CC1.4	CC1.5	CC1.6	CC2.1	CC2.2	CC2.3	CC1.1	CC1.2	CC1.3	CC1.4	CC1.5	CC1.6	CC2.1	CC2.2	CC2.3	OC1.1	OC1.2	OC1.3	OC1.4	OC1.5	OC1.6	OC1.7	OC1.8	OC1.9	OC1.10	OC2.1	OC2.2	OC2.3	OC2.4	OC2.5	OC2.6	OC2.7	OC2.8	OC2.9	OC2.10	
INT	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
GC1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
GC2		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
GC3		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
GC4		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
GC5		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
GC6		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
PC1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
PC2		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
PC3		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
PC4		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
PC5		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
PC6		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
PC7		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
PC8		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
PC9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
PC10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Symbols:

CCi - compulsory discipline, OCi - optional discipline, i - discipline number in the list of educational components, INT - integral competency, GCj - general competency, PCj - professional (special) competency, j - competency number in the list of competencies of the educational element.

4. Matrix of providing program learning outcomes with the relevant components of the educational programme

	CC1.1	CC1.2	CC1.3	CC1.4	CC1.5	CC1.6	CC2.1	CC2.2	CC2.3	CC1.1	CC1.2	CC1.3	CC1.4	CC1.5	CC1.6	CC1.7	CC1.8	CC1.9	CC1.10	OC2.1	OC2.2	OC2.3	OC2.4	OC2.5	OC2.6	OC2.7	OC2.8	OC2.9	OC2.10
KN1	X			X	X	X	X		X				X		X					X								X	
KN2				X				X	X				X			X				X	X								
KN3		X	X							X																			
KN4			X	X	X	X						X											X						X
AB1		X	X		X	X			X											X									
AB2		X					X			X										X							X		
AB3					X		X			X										X									
AB4	X					X																	X						
AB5					X			X																				X	X
AB6				X		X			X							X				X								X	X
COM1	X	X	X		X				X	X			X			X					X					X			X
COM2						X		X				X														X			
A&R 1	X			X			X								X					X	X	X	X	X	X	X	X	X	X
A&R 2					X			X													X	X	X	X	X	X	X	X	X

Symbols:

CCi - compulsory discipline, OCi - optional discipline, i - discipline number in the list of educational components, KNm - programme outcomes (knowledge), ABm - program outcomes (abilities), m - number of programme outcome in the list of programme outcomes of educational component, COMn - programme outcomes (communication), n - number of programme result in the list of programme outcomes of educational component, A&Ro - programme outcomes (autonomy and responsibility), o - number of programme outcome in the list of programme outcomes of educational component.

II. SCIENTIFIC COMPONENT OF THE EDUCATIONAL PROGRAMME

The scientific component of the educational and scientific programme includes conducting individual scientific research by the postgraduate student under the supervision of one or two academic supervisors and finalization of its results in the form of a PhD thesis.

Thesis for the degree of Doctor of Philosophy is individual detailed research that offers the solution of a current scientific problem in the specialty *015 Vocational Education (by subject specialization)*, the results of which are characterized by scientific novelty and practical value and published in relevant publications. The length of the dissertation at the time of graduation - not less than 6.25 printed sheets.

The scientific component of the educational and scientific programme is made out in the form of the individual plan of scientific work of the postgraduate student and is an integral part of the curriculum of postgraduate studies.

An integral part of the scientific component of the educational and scientific programme of postgraduate studies is preparation and publication of scientific articles, presentations at scientific conferences, scientific professional seminars, round tables, symposia.

Topics of scientific research

in the specialty *015 Vocational Education (by subject specialization)*:

1. Scientific and methodical support of the educational process in the conditions of professional pre-higher and vocational technical) education.
2. Pedagogical conditions for the development of communicative culture of graduates of vocational education institutions.
3. Pedagogical conditions for the formation of research competence of future teachers of vocational education.
4. Organizational and pedagogical conditions for the use of ICT in increasing the effectiveness of training bachelors in vocational education.
5. Formation of social and professional competencies of future teachers of vocational training.
6. Formation of the readiness of future teachers of vocational training for the training of a professionally mobile skilled worker.
7. Preparation of students for research activities in the context of competence-oriented engineering education.
8. Pedagogical conditions for training a social pedagogue to work with children with special needs by means of art pedagogy.
9. Integration of the content of professional disciplines in the preparation of a junior bachelor.
10. Organizational and pedagogical conditions of cross-cutting vocational and practical

training of a vocational teacher.

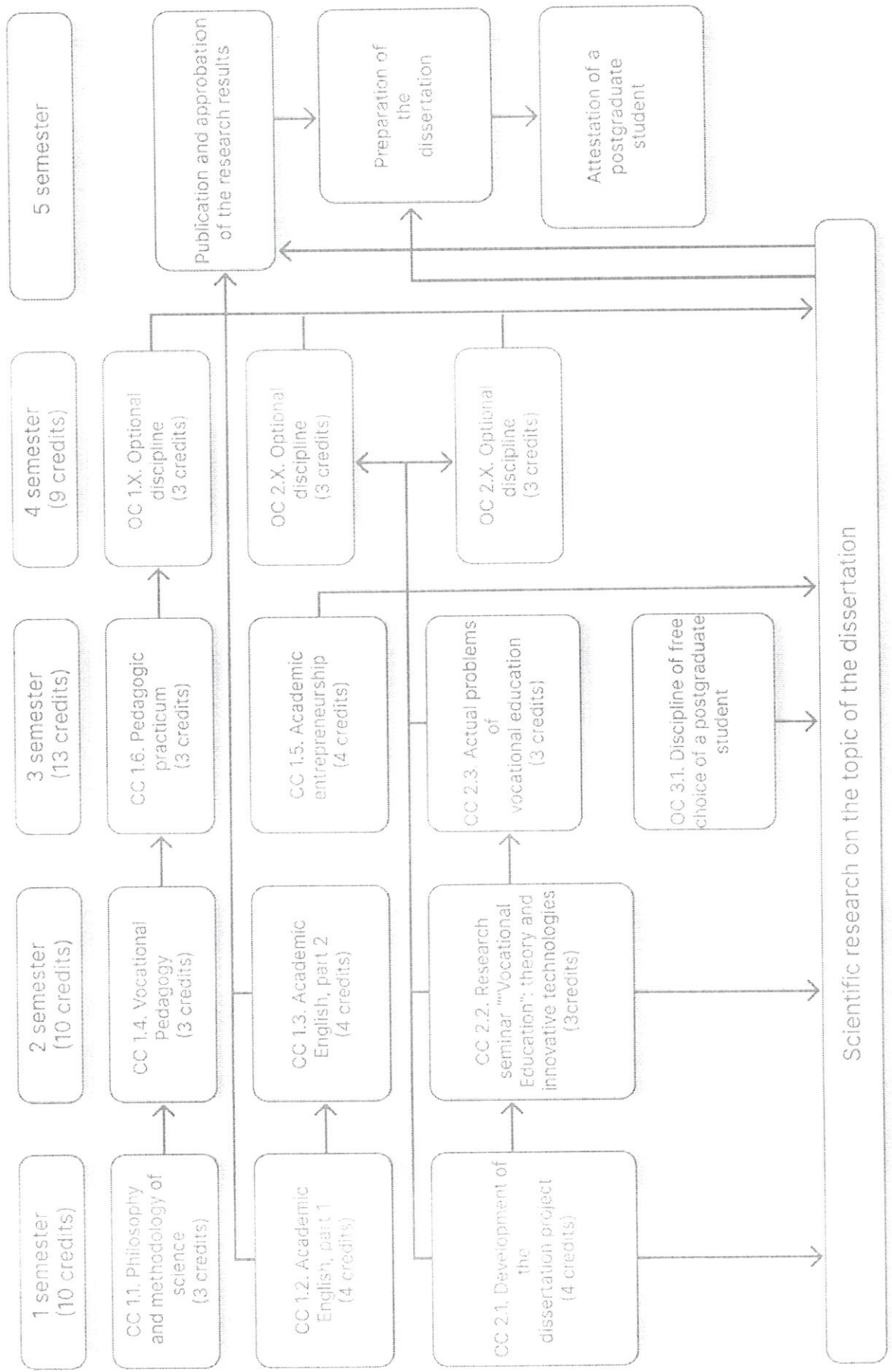
11. Organizational and pedagogical conditions for the formation of professional competencies of students of the professional pre-higher education institution.
12. Formation of professional competencies of specialists in various branches of economy.
13. Formation of managerial competence of future specialists in the management of an educational institution.
14. Formation of socio-psychological readiness of specialists for professional mobility.
15. Pedagogical support for professional and labour socialization of students of a professional education institution.
16. Competence-oriented situations as a factor of self-realization of future bachelors.
17. Professional training of specialists in conditions of dual education.
18. Formation of professional motivation of students in the process of practical training.
19. Formation of readiness of future teachers of vocational training for self-education by means of ICT.
20. Technology of formation of professional and personal self-development of a vocational education teacher.

III. ATTESTATION OF POSTGRAGUATE STUDENTS

Attestation of the postgraduate students is carried out in accordance with the Regulations “On the organization of the educational process for postgraduate students and higher education applicants for the degree of Doctor of Philosophy outside postgraduate studies, at Lviv Polytechnic National University (HES LP 02.02., <https://lpnu.ua/sites/default/files/2020/pages/2006/svo0202Polozhennyaprganizuvannyaosvitnogoprocesuvaspiranturi.pdf>), the Regulations on the procedure for training of applicants of Doctor of Philosophy at the university outside postgraduate studies (HES LP 03.16., <https://lpnu.ua/sites/default/files/2020/pages/2035/svo0316Polozhennyaproporyadokpidgotovkyzdobuvachivdoktorafilosofiyipozaaspiranturoyu.pdf>), the Temporary procedure for reporting of postgraduate students and higher education applicants for the degree of Doctor of Philosophy outside postgraduate studies, and doctoral students on the implementation of the individual plan of scientific work at Lviv Polytechnic National University (<https://lpnu.ua/sites/default/files/2020/pages/1880/timchasoviy-poryadok-zvituvannya.pdf>). In accordance with the regulatory documents in force at the time of the dissertation defense, the regulated procedure for the creation and attestation of graduate students is carried out in one-time specialized academic boards.

The dissertation must be completed in compliance with all requirements for academic integrity, which are regulated by the Regulations on Academic Integrity at Lviv Polytechnic National University dated September 8, 2017, Higher Education

Structural-logical schema of educational and scientific program in specialty 015 Vocational Education (by subject specialization)



Standards HES LP 03.14. "Regulations for detecting plagiarism in academic paper of students' qualification works, manuscripts of dissertations and monographs, manuscripts of articles submitted for publication in periodicals at the university" dated January 23, 2019, the Procedure for checking at the university for publication of monographs, textbooks and articles of the applicants for academic titles and scientific degrees of Doctor and Candidate of Sciences, as well as the statuses of the publications in which these articles are published.

The requirements for the preparation of the dissertation are established by the Ministry of Education and Science of Ukraine. The requirements for the procedure and special conditions for conducting a public defence are determined by the normative document of the Cabinet of Ministers of Ukraine in force at the time of the defence of the dissertation.