MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

RIVNE STATE UNIVERSITY OF HUMANITIES

EDUCATIONAL AND PROFESSIONAL PROGRAM

«Secondary education (Mathematics)»

The first **level of higher education**

in specialty 014 Secondary education (Mathematics)

additional specialty 014 Secondary education (Informatics)

branch of knowledge 01 Education / Pedagogy

Qualification: bachelor of secondary education, teacher of mathematics and informatics

APPROVED BY ACADEMIC COUNCIL

Chairman of the academic council

prof. Postolovskyi R.M. /_____/

(protocol No. __ dated "__" _____ 2019)

Educational program is introduced with ____ 2019

Rector prof. Postolovskyi R.M /_____/

(Order No. __ from "___" _____ 2019)

Rivne-2019

PREFACE

Educational and professional bachelor's program in specialty 014 "Secondary education (Mathematics)" was developed for the introduction as a standard of higher education at the appropriate level of higher education by the project team of the Rivne State University of Humanities composed of:

Project team leader **(educational program guarantor):**
Kraichuk O. V., candidate of physical and mathematical sciences, professor.

Project team members:
Silkov V. V., candidate of pedagogic sciences, professor;
Pavelkiv O. M., candidate of pedagogic sciences, professor;
Beleshko D. T., candidate of pedagogic sciences, professor;
Prysiazhniuk I. M., candidate of technical sciences, associate professor;
Hensitska-Antoniuk N. O., candidate of pedagogic sciences, associate professor.

The Educational and professional program was discussed and approved at the Academic council meeting of the Rivne state university of humanities.

Protocol No. __ dated "___"_____ 2019.

Chairman of the RSUH academic council _____ prof. Postolovskyi R.M.

Put into effect by the Rivne State University of Humanities rector's order dated ___ ___ __ 2019 № ____ as an interim document to the introduction of the Standard of Higher Education at the appropriate level of higher education by specialty 014 "Secondary Education (Mathematics)", additional subject specialization 014 "Secondary education (Informatics) »

1. Bachelor's program profile

from the specialty 014 Secondary education (Mathematics), with an additional subject matter specialization 014 Secondary education (Informatics)

1 – General information	
Full name of institution of education and structural unit	Rivne state university of humanities
The degree of higher education and the name of the qualification in the language of the original	Bachelor of secondary education, teacher of mathematics and informatics
The official name of educational and professional program	Educational and professional program of specialty 014 "Secondary education (Mathematics)"
Type of diploma and volume of educational professional program	Bachelor's degree, unitary, 240 credits ECTS, the term of training is 4 years
Availability of accreditation	According to the decision of the accreditation commission dated march 1, 2016, protocol No. 120 (Order of the Ministry of Education and Science of Ukraine dated March 14, 2016, No. 434) in the branch of knowledge (specialty) 01 Education / Pedagogy 014 Secondary education (Mathematics) is recognized as accredited by the level of bachelor (based on the order of the Ministry of Education and Science of Ukraine dated January 19, 2014, No. 1565) Series НД № 1889764 Valid until 01.07.2026
Cycle / Level	NQF Ukraine - level 7, FQ-EHEA - first cycle, EQF-LLL - 7 level
Prerequisites	Complete secondary education
Language (s) of teaching	Ukrainian
The duration of the educational program	on 01.07.2026
Internet address of the permanent description of the educational program	http://fmi-rshu.org.ua/pages/informatyka-b7faf4b1-b886-472b-97e0-8f801020ee15.
2. **The purpose of the educational program**	
To prepare highly skilled, professionally competent specialists able to work on a competitive basis in different types of educational institutions capable of organizing the process of studying mathematics and informatics.	
3. Characteristics of the educational program	
Field of study (branch of knowledge, specialty, specialization (if any))	Branch of knowledge 01 Education / Pedagogy, specialty 014 Secondary education (Mathematics). The volume of mathematics from the total volume of the educational program is 46%, Informatics - 27%. The object of study is the educational process in secondary schools (mathematics, computer science).

	Learning Objectives: Formation of professional competences of future teaching staff in mathematics and computer science for performing professional activities in primary high school. Theoretical content of the subject area: theory of cognition, theory of personality and its development, theory of activity as a factor of personality development, theory and methodology of teaching mathematics, theoretical foundations of mathematical sciences, theory and methodology of teaching computer science; Computer Technology; information and communication technologies; education quality standards. Methods, tools: methods and means of education, upbringing and versatile development of students in school; methods and tools of mathematics; methods of collecting, analyzing and consolidating information; pedagogical modeling; methods and algorithms for solving theoretical and applied problems; methods of application of information and communication technologies in educational activity; methods and algorithms for solving educational problems in information and communication technologies and programming; methods of computer graphics and data visualization technology; Knowledge engineering technologies. Tools and equipment: special tools and equipment needed in the teaching of mathematics students; didactic means (didactic materials); hardware and software (demonstration equipment, newest learning technologies, applied mathematical software packages; methodological tools; bases for conducting various types of practice.
Orientation of the educational program	The Educational and professional program is oriented on theoretical and practical training of pedagogical staff for performing professional activity in educational institutions of different levels of education, who possess modern methods and technologies of organization of educational process, general and special (professional) competencies, ready for scientifically grounded innovations in education.
The main focus of educational programs and specialization	Preparation of a bachelor in the branch of knowledge 01 "Education / Teaching" in the specialty 014 "Secondary education (Mathematics)", additional specialty 014 "Secondary education (Informatics)" Key words: pedagogy of secondary school, mathematics, higher mathematics, elementary mathematics, methods of teaching mathematics, methods of teaching informatics, modern pedagogical technologies, educational information systems, multimedia systems, information and communication technologies, basics of programming.
Features of the program	The educational program is developed taking into account the experience of preparing secondary education bachelors and future teachers in mathematics, informatics at leading domestic and foreign universities, and training of scientific staff from related specialties in the system of institutes of the National Academy of Sciences of Ukraine and national research universities, as well as many years of experience in training specialists in the branch of knowledge in specialty "Secondary Education (Mathematics)", "Secondary Education (Computer Science)".
4. Ability of graduates to employment and further training	
Ability to employment	Types of economic activity (according to the "State Classifier of Types of Economic Activities SC 009: 2010"): 85.31 General secondary education; 85.32. Vocational and technical education; 85.42 Higher education; 62.02

	Advice on informatization issues; 62.03 Management of computer equipment; 62.09 Other activities in the field of information technology and computer systems; 63.11 Processing of data, placement of information on web-sites and related activities; 63.12 Web portals. Professional titles (according to the National Classifier of Professions NC 003: 2010): 2310.2 Assistant; 2320 Teacher of a secondary educational institution; 2320 Methodologist of correspondence schools and departments; 234 Teachers of specialized educational institutions; 235 Other education professionals; 2351.2 Teacher (teaching methods); 352 Educational inspectors; 2359 Other education professionals; 2359.1 Other research staff in the field of education; 2359.2 Other education professionals; 3121.2 Specialist in information technology; 3121.2 Specialist in software development and testing;
Further training	Continuing education for the second level of higher education - an educational degree "master", a master's degree in secondary education, a master's degree in theoretical and applied mathematics.
5 - Teaching and learning	
Teaching and learning	Teaching on the basis of student-centered and problem-oriented learning with the use of multimedia lectures, practical and laboratory classes, passing of practices, with the involvement of self-education.
Assessment	Types of control: by levels: self-control, control at the teacher's level, control at the level of the head of the department, control at the level of the dean's office, control at the level of the rectorate, state control; by time: operative (incoming, current, intermediate, final) and delayed. Forms of control: Oral and written examinations, tests, colloquiums, laboratory reports, protection of practice reports, protection of term papers, attestation (defense of qualification work or complex examination). Assessment of academic achievement: 5-point national scale (excellent, good, satisfactory, unsatisfactory); 2-tier national scale (enrolled / unassigned); 100-point system and ECTS scale (A, B, C, D, E, F, FX).
6 - Program competencies	
Integral competence	Ability to solve complex specialized tasks and practical problems in a certain area of professional activity or in the process of study, which involves the application of certain theories and methods, the latest technology of the relevant science.
General competencies (GC)	**GC 1.** The ability to abstract thinking, analysis and synthesis based on logical arguments and verified acts. **GC 2.** The acquisition of flexible thinking, openness to the application of knowledge in mathematics and informatics, competencies in a wide range of workplaces and everyday life. **GC 3.** Ability to work in a group under the leadership of a leader, demonstrate skills to take into account strict discipline, planning and time management. **GC 4.** Ability to use information and communication technologies. **GC 5.** The ability to direct yourself in a certain way to achieve important goals that will contribute to the development of knowledge through research. **GC 6.** Knowledge and understanding of the subject area and understanding of professional activity. **GC 7.** Ability to apply methods and methods of teaching, methods of self-education in order to master modern knowledge. **GC 8.** Ability to use national and foreign languages for effective communication and presentation of complex complex information in a

	concise form orally or in writing, including when using numerals, alphabets and formulations of mathematical concepts and most commonly used terms. **GC 9.** Adherence to ethical principles both in terms of professional integrity and in terms of understanding the possible influence of advances in mathematics and informatics on the social sphere**.** **GC 10.** The ability to realize their rights and responsibilities as a member of society, to realize the values of civil (free, democratic) society and the need for its sustainable development, the rule of law, the rights and freedoms of man and citizen in Ukraine. **GC 11.** Ability to preserve and enhance moral, cultural, scientific values and achievements of the society on the basis of understanding of the historical and natural development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, technology and technology, to use different types and forms of motor activity for active rest and healthy living.
Professional competence of the specialty (PC)	**PC 1**. Ability to understand the basic concepts, principles, theories and results of mathematics. **PC 2**. Possession of special mathematical terminology and its ability to convey using mathematical notation. **PC 3.** Ability to think mathematically and logically, formulate and investigate mathematical and physical models, justify the choice of methods and approaches for solving theoretical and applied problems, in particular in the field of computer science and interpretation of the obtained results. **PC 4.** Ability to mathematically formulate the formulation of a problem, to consider different ways of solving it, and to demonstrate proficiency in mathematical reasoning, manipulation and calculation. **PC 5.** Willingness and ability to work with methodical and methodological-mathematical information. **PC 6.** Ability to substantiate hypotheses and understand mathematical reasoning and ability to demonstrate knowledge of different methods of mathematical proof. **PC 7.** The presence of a system of scientific knowledge in mathematical disciplines, the methods of teaching mathematics in primary school and the ability to apply them in solving practical problems. **PC 8.** Ability to solve a wide range of mathematical problems and problems using mathematical tools and mathematical software packages. **PC 9.** Ability to choose the necessary tools, forms and methods of organizing student activity in the learning process; ability to introduce modern techniques and technologies, innovative approaches, advanced pedagogical experience in modeling and organization of educational activities in secondary education institutions. **PC 10.** Ability to provide the proper level of teaching of mathematics and / or computer science in accordance with current curricula, in compliance with the requirements of the State standard of basic and complete secondary education and to carry out an objective control and evaluation of the level of educational achievement of students. **PC 11.** Ability to expand and deepen their own scientific worldview, independently acquire and use in practice their new knowledge, skills and competences, based on the acquired knowledge in mathematics and computer science, including in the fields not related to the field of professional activity. **PC 12.** Ability to provide the organization of computing processes in information systems for various purposes, taking into account the

	architecture, configuration, performance indicators of operating systems, selection and use of general and primary purpose software. **PC 13.** Ability to reasonably select and use search engine technologies and tools, software and information resources to create an educational information system for an educational institution. **PC 14.** Ability to analyze research findings, use them in your chosen profession, formulate directions for your own research, and find ways to solve them. **PC 15.** Ability to manage students' research activities; to summarize and organize their own professional experience and submit it in the form of reports, articles, speeches, etc. **PC 16.** Здатність до ефективної комунікаційної взаємодії у різних колективах з питань фахової та суміжних з нею діяльностей, в тому числі з використанням сучасних засобів зв'язку.
7 – **Program learning outcomes**	
Knowledge	**PLO 1.** Knowledge of basic concepts and theoretical positions of elementary and higher mathematicians. **PLO 2.** Knowledge of methods, methods and algorithms for solving problems in mathematics and / or computer science, to give, if necessary, illustrations, examples, counterexamples. **PLO 3.** Knowledge of the basic forms and laws of abstract-logical and system-combinatorial thinking, the basics of logic, forms and methods of analysis, synthesis and other techniques of mental activity. **PLO 4.** Knowledge of forms, methods and means of control and correction of knowledge of students in mathematics and / or computer science. **PLO 5.** Knowledge of the content of different types of extracurricular and extracurricular work in mathematics and / or computer science. **PLO 6.** Knowledge of lexical, grammatical, stylistic features of national and foreign vocabulary, terminology in the fields of mathematics and / or computer science, grammatical structures for understanding and producing foreign and written foreign texts in the professional field. **PLO 7.** Knowledge of methods of teaching mathematics and / or computer science, state standards in the subject area, content and structure of existing school textbooks and other educational and methodical materials and ability to analyze them. **PLO 8** Knowledge of requirements for methodical, didactic, technical and software of general and educational purpose of mathematics and informatics rooms. **PLO 9.** Knowledge of principles, tools, programming languages and programming methods, web programming languages, modern Internet technologies, database creation technologies, educational information environments; knowledge of opportunities and ability to use them in professional activities. **PLO 10.** Knowledge of modern technologies, science-based techniques, methods and teaching aids. **PLO 11.** Knowledge of the content of the components of the education system, the components of self-educational activity, the basics of research. **PLO 12.** Knowledge and understanding of the necessity of observing healthy lifestyles, life safety and safety principles. **PLO 13**. Basic knowledge of the basics of philosophy, psychology, ecology, sociology; awareness of national history, ethics and human rights principles; understanding of cause and effect relationships in society, the principles of teamwork, team values, the basics of conflictology.

Ability	**PLO 14.** Ability to apply knowledge of higher and elementary mathematicians in solving problems in high school mathematics, non-standard and olympiad problems, to form a scientific way of thinking of students. **PLO 15.** Ability to formulate definitions, axioms and theorems in mathematics, to substantiate and prove basic theorems and to be able to apply them in solving specific mathematical and applied problems. **PLO 16.** The ability to form students' understanding of the basics of mathematical modeling, a willingness to apply modeling in solving problems, and it is advisable to use mathematical software packages. **PLO 17.** Ability to determine the structure of mathematics and / or computer science lessons; to choose appropriate forms, methods and means of teaching in accordance with the didactic purpose of the lesson, taking into account: the age characteristics of the students, their level of learning and learning, the specifics of the topic being studied. **PLO 18.** Ability to plan pedagogical activities, to define and substantiate pedagogical tasks and to apply principles and methods of teaching and upbringing in pedagogical process taking into account age and physiological peculiarities of students. **PLO 19**. Ability to apply innovative technologies of organization of educational and cognitive and educational work, to carry out pedagogical researches and to creatively use advanced pedagogical experience. **PLO 20.** Ability to make cross-curricular and inter-subject connections when studying specific topics, higher maths and maths school course. **PLO 21.** Ability to develop algorithms for solving problems in computer science, use modern ICT, information databases, web resources, Internet services to develop their own teaching and learning materials, materials for professional development and to implement the principles of lifelong learning. **PLO 22.** Ability to form students' value orientations, carry out pedagogical support of socialization processes with observance of norms of healthy lifestyle and principles of safety of life activity, preparation of them for conscious choice of life path and professional self-determination of students. **PLO 23.** Ability to find and analyze from a scientific and methodological point of view different technologies, techniques, educational resources in different sources of information, adapt them to the author's methodical teaching system.
Communication	**PLO 24.** Be able to carry out educational communication between the participants of the educational process, to perceive and convey educational and scientific information.
Autonomy and responsibility	**PLO 25.** Ability to improve with a high level of autonomy acquired during training qualification and to design directions for further professional growth and self-development.
8 – Resource support for the implementation of the program	
Ensure Staffing	Conducting lectures on academic disciplines by scientific and pedagogical workers of the corresponding specialty having a degree and / or academic rank and working at their main place of work is more than 50% of the number of hours specified by the curriculum.
Material and technical support	Material and technical support meets the licensing requirements for providing educational services in the field of higher education and is sufficient to ensure the quality of the educational process.

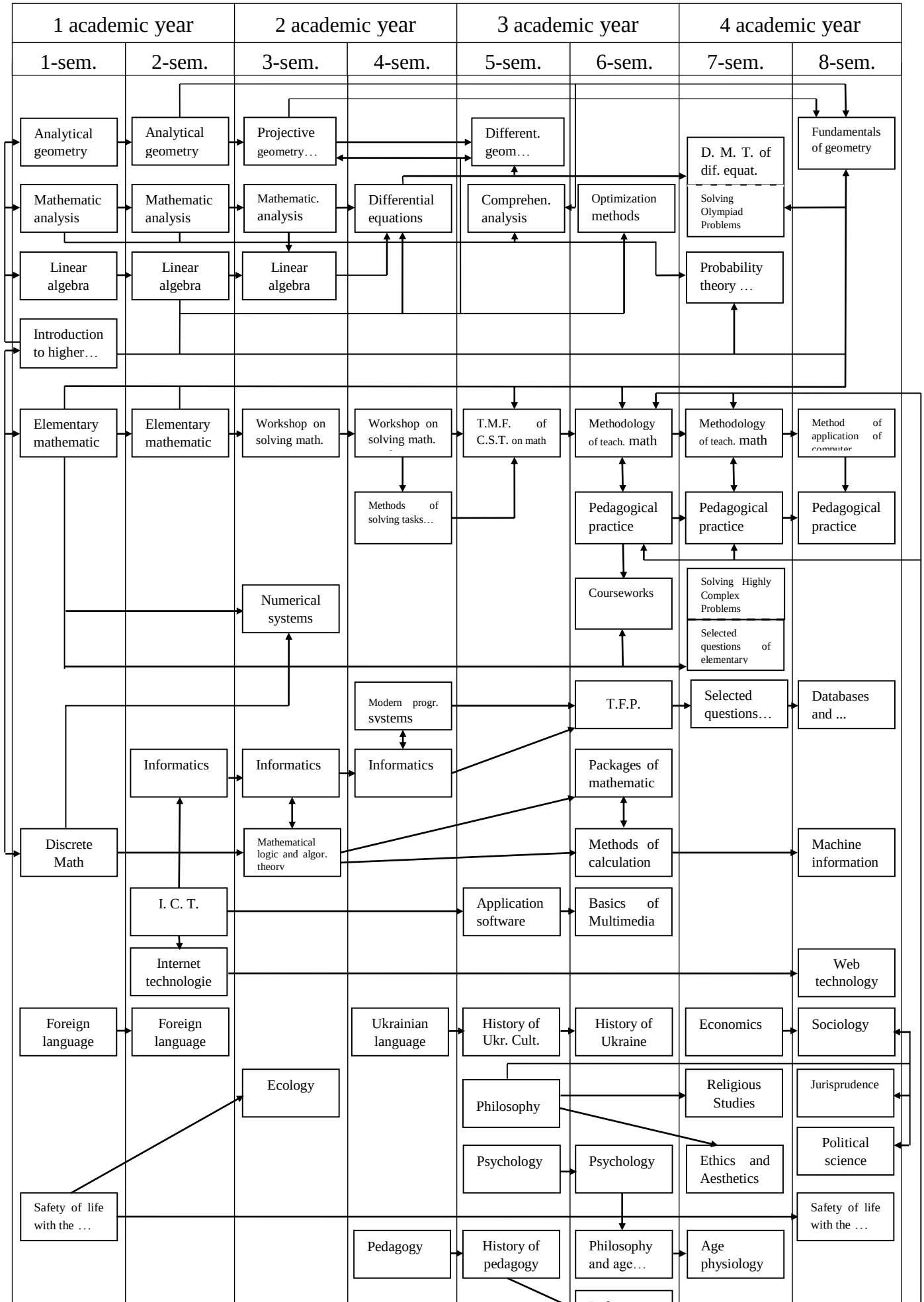
Information and educational-methodical support	Use of the virtual learning environment of the Rivne State University of Humanities and the author's development of the professorial teaching staff.
9 – Academic mobility	
National credit mobility	On the basis of bilateral agreements between the Rivne State University of Humanities and higher educational institutions and scientific institutions of Ukraine.
International Credit Mobility	Rivne State University of Humanities within the framework of the Bologna process actively implements the right of participants of the educational process to academic mobility (semester training of students and internship of teachers) at the Jan Dluosha Academy in Czestochowa (Republic of Poland)
Teaching foreign applicants for higher education	Possible

2. List of components of the educational program and their logical consistency

Codes\d	The component of the educational program (educational disciplines, course projects (work), practice, qualification work)	Number of credit	Form of final control
1	2	3	4
COMPULSORY COMPONENTS OF THE EDUCATION PROGRAM			
Cycle of general preparation			
CC1	History of Ukraine	3	exam
CC2	History of Ukrainian Culture	3	exam
CC3	Ukrainian language (in professional direction)	3	exam
CC4	Philosophy	3	exam
Cycle of professional preparation			
CC5	Algebra and number theory	6	exam
CC6	Differential equations	4,5	exam
CC7	Probability Theory and Mathematical Statistics	4,5	exam
CC8	Informatics	12	exam test
CC9	Methods of calculation	3	exam
CC10	Comprehensive analysis	4,5	exam
CC11	Differential geometry and topology	4,5	exam
CC12	Optimization methods	3	test
CC13	Psychology	7,5	exam test
CC14	Pedagogy	6	exam test
CC15	History of pedagogy	3	test
CC16	Methodology of teaching mathematics	7	exam
CC17	Elementary mathematics	9	exam test
CC18	Mathematical analysis	19	exam
CC19	Analytical geometry	6	exam
CC20	Linear algebra	6	exam
CC21	Projective geometry and image methods	3	test
CC22	Discrete Math	4	exam

CC23	Mathematical logic and algorithm theory	3	exam
CC24	Fundamentals of geometry	3	exam
CC25	Numerical systems	3	exam
CC26	Information and communication technologies	3	test
CC27	Internet technologies	3,5	test
CC28	Basics of Multimedia	3,5	test
CC29	Courseworks	3	test
CC30	Pedagogical practice (production)	9	Test
CC31	Pedagogical practice (propaedeutic)	3	
The total amount of mandatory components		158,5	
SELECTED DISCIPLINES			
Sample block 1 (Cycle of general preparation)			
SC 1	Age physiology and valeology	3	test
SC 2	Safety of life with the basics of labor protection	3	exam test
SC 3	Ecology	3	test
SC 4	Foreign language (in professional orientation)	6	exam
SC 5-7	Economics / Religious Studies / Ethics and Aesthetics	3	test
SC 8-10	Jurisprudence / Sociology / Political science	3	test
Sample block 2 (Cycle of professional preparation in specialty 014 Secondary education (Mathematics)			
SC 11	Introduction to higher mathematics	3	test
SC 12	Workshop on solving mathematical problems	6,5	test
SC 13	Methods of solving tasks for verification in SMC	5	test
SC 14	Theoretical and methodological foundations of constructing school textbooks on mathematics	3,5	test
SC 15	Packages of mathematical programs	3	test
SC 16-17	Development of the modern theory of differential equations in partial derivatives / Selected questions of elementary mathematics	3	test
SC 18-19	Solving Olympiad Problems Using Elements of Higher Mathematics / Solving Highly Complex Problems	3	test
SC 20	Method of application of computer technology in the study of mathematics (by professional orientation)	3	test
Sample block 3 (Cycle of professional preparation in specialty 014 Secondary education (Informatics)			
SC 21	Databases and information systems	8	exam
SC 22	Machine information processing	3	exam
SC 23	Web technology	3	exam
SC 24	Selected questions of the school course of informatics with teaching method	8	test
SC 25	Modern programming systems	3	test
SC 26	Theoretical foundations of programming	3	test
SC 27	Application software	4,5	test
Total amount of sample components		91,5	
Total amount of educational program		240	

2.1. Structural-logical schem EC



3. Form of applicants attestation for higher education

Attestation of graduates of the educational program in the specialty 014 "Secondary education (Mathematics)" is carried out in the form of defense of the thesis or compilation of a complex examination on specialty and ends with the issuance of the document of the established sample on awarding him a bachelor's degree with qualification: Bachelor of secondary education, lector of mathematics. Teacher of Mathematics.

The attestation is carried out openly and publicly.

4. Matrix of compliance of software competencies to the components educational program

4.1 Matrix of Compliance of Software Competencies required components of the educational program

Matrix 4.1

	CC1	CC2	CC3	CC4	CC5	CC6	CC7	CC8	CC9	CC10	CC11	CC12	CC13	CC14	OK15
GC1	+	+		+	+	+	+	+	+	+	+	+	+	+	+
GC2			+	+	+	+	+	+	+	+	+	+	+	+	
GC3														+	
GC4								+	+			+			
GC5															
GC6													+	+	
GC7					+	+	+	+	+	+	+	+		+	
GC8			+												
GC9													+	+	
GC10	+	+	+	+	+	+	+	+	+	+	+	+	+	+	
GC11			+		+	+	+	+	+	+	+	+	+	+	
PC1					+	+	+		+	+	+	+			
PC2					+	+	+			+	+	+			
PC3					+	+	+			+	+	+			
PC4					+	+	+			+	+	+			
PC5														+	
PC6					+	+	+			+	+	+			
PC7					+	+	+			+	+	+			
PC8									+			+			
PC9														+	+
PC10															
PC11					+	+	+	+	+	+	+	+			
PC12								+							
PC13															
PC14															
PC15															
PC16			+											+	

Prolongation of the matrix 4.1

	CC16	CC17	CC18	CC19	CC20	CC21	CC22	CC23	CC24	CC25	CC26	CC27	CC28	CC29	CC30	CC31
GC1	+	+	+	+	+	+	+	+	+	+	+			+		
GC2	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
GC3															+	+
GC4											+	+	+			
GC5														+	+	
GC6	+															
GC7	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
GC8																
GC9	+													+		
GC10																
GC11																
PC1	+	+	+	+	+	+	+	+	+	+						
PC2	+	+	+	+	+	+	+	+	+	+				+		
PC3		+	+	+	+	+	+	+	+	+						
PC4	+	+	+	+	+	+	+	+	+	+						
PC5	+															
PC6	+	+	+	+	+	+	+	+	+	+						
PC7	+	+	+	+	+	+	+	+	+	+						
PC8																
PC9	+															
PC10	+														+	+
PC11	+	+	+	+	+	+	+	+	+	+	+	+	+	+		
PC12											+	+	+			
PC13											+	+	+			
PC14														+	+	
PC15	+														+	
PC16											+		+			

4.2 Matrix of Competence of Program Competencies to the Selective Components of the Educational Program

Matrix 4.2

	SC1	SC2	SC3	SC4	SC5	SC6	SC7	SC8	SC9	SC10	SC11	SC12	SC13	SC14
GC1											+	+	+	+
GC2											+	+	+	+
GC3														
GC4														
GC5											+	+	+	+
GC6											+	+	+	+
GC7														
GC8				+										
GC9					+		+							
GC10		+			+	+	+	+	+	+				
GC11	+	+	+		+	+	+		+	+				
PC1											+	+	+	
PC2											+	+	+	
PC3											+	+	+	
PC4											+	+	+	
PC5														+
PC6											+	+	+	
PC7											+	+	+	+
PC8														
PC9	+	+												
PC10														+
PC11			+		+				+					+
PC12														
PC13														
PC14														
PC15														
PC16				+										

Prolongation of the matrix 4.2

	SC15	SC16	SC17	SC18	SC19	SC20	SC21	SC22	SC23	SC24	SC25	SC26	SC27
GC1		+	+	+	+	+	+	+	+		+	+	
GC2		+	+	+	+	+	+				+	+	+
GC3											+		
GC4	+					+	+	+	+			+	+
GC5		+	+	+	+								
GC6	+	+	+	+	+					+		+	
GC7		+	+	+		+				+			
GC8													
GC9									+				
GC10													
GC11													
PC1		+	+	+	+								
PC2		+	+	+	+								
PC3		+	+	+	+								
PC4		+	+	+	+								
PC5										+			
PC6		+	+	+	+								
PC7		+	+	+	+								
PC8	+					+							
PC9										+			
PC10										+			
PC11										+	+	+	+
PC12							+	+	+		+	+	+
PC13	+					+	+	+	+		+	+	+
PC14													
PC15													
PC16													

5. Matrixes for the provision of program learning outcomes (PLO) to the relevant components of the educational program

5.1 Matrix for the provision of program learning outcomes (PLO) to the relevant compulsory components of the educational program

Matrix 5.1

	CC1	CC2	CC3	CC4	CC5	CC6	CC7	CC8	CC9	CC10	CC11	CC12	CC13	CC14	CC15
PLO 1					+	+	+			+	+	+			
PLO 2					+	+	+	+	+	+	+	+			
PLO 3					+	+	+	+	+	+	+	+	+		
PLO 4														+	
PLO 5														+	
PLO 6			+												
PLO 7															
PLO 8															
PLO 9								+	+						
PLO 10														+	
PLO 11														+	
PLO 12															
PLO 13	+	+		+									+		
PLO 14					+	+	+			+	+	+			
PLO 15					+	+	+			+	+	+			
PLO 16						+			+						
PLO 17														+	
PLO 18														+	+
PLO 19														+	+
PLO 20					+	+	+			+	+	+			
PLO 21								+	+						
PLO 22	+	+	+	+									+		
PLO 23								+							+
PLO 24														+	
PLO 25															

Prolongation of the matrix 5.1

	CC16	CC17	CC18	CC19	CC20	CC21	CC22	CC23	CC24	CC25	CC26	CC27	CC28	CC29	CC30	CC31
PLO 1		+	+	+	+	+	+	+	+	+						
PLO 2	+	+	+	+	+	+	+	+	+	+	+					
PLO 3		+	+	+	+	+	+	+	+	+						
PLO 4	+															
PLO 5																
PLO 6																
PLO 7	+															
PLO 8	+														+	+
PLO 9											+	+	+			
PLO 10	+															
PLO 11																
PLO 12																
PLO 13																
PLO 14		+	+	+	+	+	+	+	+	+					+	
PLO 15		+	+	+	+	+	+	+	+	+						
PLO 16																
PLO 17	+														+	+
PLO 18															+	+
PLO 19															+	
PLO 20	+	+	+	+	+	+	+	+	+	+						
PLO 21											+	+	+			
PLO 22															+	
PLO 23	+													+	+	+
PLO 24														+	+	
PLO 25														+	+	

5.2 Matrix for the providing of program learning (PLO) outcomes to relevant sample components of the educational program

Matrix 5.2

	SC1	SC2	SC3	SC4	SC5	SC6	SC7	SC8	SC9	SC10	SC11	SC12	SC13	SC14
PLO 1											+	+	+	
PLO 2											+	+	+	
PLO 3														
PLO 4														
PLO 5														
PLO 6				+										
PLO 7														+
PLO 8														
PLO 9														
PLO 10														
PLO 11														
PLO 12	+	+												
PLO 13	+		+		+	+	+	+	+	+				
PLO 14											+	+	+	+
PLO 15											+	+	+	
PLO 16												+	+	
PLO 17														+
PLO 18	+													
PLO 19														
PLO 20											+	+	+	+
PLO 21														
PLO 22	+	+	+		+	+	+	+	+	+				
PLO 23														
PLO 24														+
PLO 25														+

Prolongation of the matrix 5.2

	SC15	SC16	SC17	SC18	SC19	SC20	SC21	SC22	SC23	SC24	SC25	SC26	SC27
PLO 1		+	+	+	+								
PLO 2		+	+	+	+		+	+	+	+	+	+	+
PLO 3													
PLO 4										+			
PLO 5										+			
PLO 6													
PLO 7										+			
PLO 8										+			
PLO 9	+					+	+	+	+	+	+	+	+
PLO 10										+			
PLO 11													
PLO 12													
PLO 13													
PLO 14		+	+	+	+								
PLO 15		+	+	+	+								
PLO 16	+	+		+	+	+							
PLO 17										+			
PLO 18													
PLO 19													
PLO 20		+	+	+	+								
PLO 21							+	+	+	+	+	+	+
PLO 22													
PLO 23										+			
PLO 24										+			
PLO 25													

6. Attestation

Student attestation is carried out by the examination commission after the completion of education at the educational level to establish the actual compliance of the level of training with the requirements of the educational program. The student is being tested according to the system of program learning outcomes, which is defined in the educational program of specialist training. Form of attestation: defense of the graduate work of a bachelor's degree or a state examination.

Diploma paper involves conducting analysis and theoretical development(modeling and research of processes and objects) of actual issues, problems in the relevant branch of knowledge . The topics list of diploma papers is determined by the graduation department at the beginning of the academic year. Subject diploma papers should be directly related to the general object of the activity of a specialist of the corresponding educational level. The topics list is approved by the order of the rector before the beginning of graduation practice. Students have the right to propose their own topic of diploma paper.

The assignment for the diploma paper must reflect all the production functions and typical tasks of the activities of specialist and be timely delivered to the student (before the practice).

Professors, associate professors, senior lecturers of the graduate department, and leading specialists of the industrial sphere of the relevant branch may be chiefs of diploma papers

The attestation of applicants for higher education of a bachelor's degree is carried out by an examination commission, which may include representatives of employers and their associations, in accordance with the provisions of the examination committee, approved by the Academic Council of the RSUH.

7. The system of internal quality assurance in higher education

The Rivne State University of Humanities has a system of providing higher education institutions with quality education and quality of higher education (internal quality assurance system), which provides for the following procedures and measures:

1) definition of principles and procedures for ensuring the quality of higher education;
2) monitoring and periodic review of educational programs;
3) annual assessment of higher education graduates, scientific and pedagogical and pedagogical staff of universities and regular publication of the results of such assessments on the university website, on information stands and in any other way;
4) ensuring the professional development of pedagogical, scientific and scientific and pedagogical workers;
5) ensuring the availability of the necessary resources for the organization of the educational process, including the independent work of applicants for higher education for each educational program;
6) ensuring the availability of information systems for the effective management of the educational process;
7) ensuring publicity of information about educational programs, degrees of higher education and qualifications;
8) ensuring an effective system for preventing and detecting academic plagiarism in scientific works of higher education and higher education graduates;
9) other procedures and measures.

The system of providing higher education institutions the quality of educational activities and the quality of higher education (the system of internal quality assurance) may, upon the submission of the RSUH, be assessed by the National Agency for the Quality Assurance of Higher Education or the independent institutions accredited by it for the assessment and quality assurance of higher education on the subject of its compliance with the requirements for the system of quality assurance in higher education, approved by the National Agency for the Quality Assurance of Higher Education, and international standards and guidelines for quality assurance in higher education.

Guarantor of the educational program, project team leader — associate professor Kraichuk O. V.