# MINISTRY OF HEALTH OF UKRAINE KHARKIV NATIONAL MEDICAL UNIVERSITY

# Department of Public Health and Health Management

academic year 2024-2025

# SYLLABUS OF THE EDUCATIONAL COMPONENT

# «METHODOLOGY OF RESEARCH WORK»

(name of the discipline)

Selective educational component

Form of education

Full-time

(full-time; correspondence; remote)

Branch of knowledge

22 «Health care»

(code and name of the field of knowledge)

Specialty

223 «Nursing»

(code and name of the field of knowledge)

Educational and professional program

«Nursing»

First (bachelor's) level of higher education

Course

4-th

Syllabus of the educational component was approved at the meeting of the department public health and health management

Approved by the methodical commission of KhNMU on public health problems

Protocol from

(signature)

"27" august 2021 № 13

Protocol from

"01" september 2021 № 2

Head of Department

(surname and initials)

(signature)

(surname and initials)

# **SYLABUS DEVELOPERS::**

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Consultations	Tuesday 15.30-17.00		
Location	Audience of the Department of Public Health and Health		
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#### INTRODUCTION

**Syllabus of the educational component** «is compiled in accordance with the educational and professional program (hereinafter referred to as the EPP) "Nursing" and the Standard of Higher Education of Ukraine (hereinafter referred to as the Standard), first (bachelor's) level, branches of knowledge 22 "Healthcare", specialties 223 "Nursing"

# Description of the educational component (annotation).

The educational component "Methodology of Research Work" examines the essence of science and its role in the development of society; scientific products and their types.

The section on the features of selecting and planning research work and its organization is considered especially useful.

The issues of the essence of scientific information and the basic principles of working with it are considered; features of intellectual property protection

The educational component presents in a detailed form the features of scientific activity, its organization and effectiveness, as well as the features of the scientific work of applicants, young researchers and scientists who have already developed and mastered the skills of using this knowledge to organize their own professional and scientific activities.

The subject of study of the educational component "Methodology of research work", a significant place is devoted to the study of theoretical aspects and mastery of practical issues of the features of the implementation and publication (presentation, publication, defense) of various types of scientific activities and their implementation in practical activities.

**Interdisciplinary links:** The educational component "Methodology of research work" is closely related to the issues, competencies and skills that applicants acquire when studying such educational components as "Biostatistics", "Fundamentals of Evidence-Based Medicine", "Fundamentals of Public Health", as well as "Ethical Standards in public health." In general, the content of the educational component is also connected with almost all mandatory and optional components of the program, because it forms an idea of the features of organizing and carrying out scientific research in the field of laboratory diagnostics in any area.

**Prerequisites:** studying the educational component "Methodology of research work" is based on possession of the necessary knowledge that must be resolved in the process of studying the educational component: mastering knowledge regarding the types of research work and the requirements of the Higher Attestation Commission of Ukraine for scientific publications; in relation to the laws and categories of the logic of science and logical forms of scientific thinking; about methodological levels, principles and methods of scientific research.

**Postrequisites:** gain knowledge, skills and competencies to evaluate the development of skills in the use of methodological levels and principles in the course of scientific research; on the application of methodological principles and methods of scientific research; preparation of the scientific research manuscript and its presentation in defense. Improve the organization and improvement of the activities of specialists.

#### 1. PURPOSE OF THE COURSE AND TASKS OF THE COURSE

**1.1.** The purpose of studying the educational component of "Methodology of research work" is the mastery of knowledge and skills in the application of the laws of scientific knowledge, logical laws and forms, levels of methodology, principles and methods of scientific research, as well as the design and presentation of the results of scientific research in defense.

## **1.2.** The main objectives of studying the educational component are:

- acquisition of knowledge: regarding types of research work and requirements of the Higher Attestation Commission of Ukraine for scientific publications; in relation to the laws and categories of the logic of science and logical forms of scientific thinking; about methodological levels, principles and methods of scientific research.

- development of skills:
- in the use of methodological levels and principles in the course of scientific research;
- on the application of methodological principles and methods of scientific activity;
- preparation of the scientific research manuscript and its presentation in defense.
- **1.3.** Competence and learning outcomes, the formation of which is facilitated by the educational component "Methodology of Research Work"

In accordance with the requirements of the educational component standard, ensures that applicants acquire competencies:

# $\Box$ integral:

The Bachelor of Nursing is able to solve complex specialized problems and practical problems in the field of nursing or in the learning process, which involves the application of certain theories and methods of the relevant science and is characterized by complexity and uncertainty of conditions.

# $\square$ general:

- 01. The ability to realize one's rights and responsibilities as a member of society, to understand the values of a 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.
- 02. The ability to preserve and enhance moral, cultural, scientific values and achievements of society based on an understanding of the history and patterns of 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 various types and forms of motor activities for active recreation and healthy lifestyle
  - 03. Ability for abstract thinking, analysis and synthesis
  - 04. Ability to apply knowledge in practical situations
  - 08. Skills in using information and communication technologies

# $\sqcap$ special (professional, subject):

09 ability to organize, implement and control the nursing process in palliative and hospice care.

# **1.3.2.** The study of the educational component ensures that education applicants acquire subsequent **program learning outcomes:**

**PLO 3.** Planning nursing intervention.

In the conditions of healthcare, at home and under unforeseen circumstances, be able to draw up a plan of nursing interventions to solve actual and related problems of patients of all ages.

**PLO 4**. Monitor the work of junior medical personnel and the condition of equipment.

In conditions 303, in accordance with job responsibilities, in order to comply with the sanitary and anti-epidemic regime, be able to:

- conduct training for junior medical staff in the performance of functional duties and labor protection; monitor compliance with safety regulations by junior medical personnel;
- supervise the work of junior medical staff; monitor compliance with internal regulations by staff and patients; monitor compliance with sanitary and hygienic measures in wards and medical offices.

## PLO 5. Perform nursing administration.

In conditions 303, in order to implement organizational and managerial competencies, be able to:

- make management decisions and ensure their implementation based on the use of nursing leadership models;
  - ensure the execution of orders and regulations on health issues;
  - master the functional responsibilities of the head of nursing services;
- know the procedure for licensing and accreditation of medical institutions, laboratories of various profiles, etc..
  - **1.3.3.** Studying the educational component ensures that education applicants acquire the following

## soft skills:

- Social skills
- Leadership skills
- Ways of thinking.

Training allows you to acquire social skills both through professional educational components, which include social elements for work in the field of public health, a block of selective educational components (which contribute to the development and improvement of ways of thinking, professional, ideological, social qualities, moral and ethical values), and through undergoing industrial (managerial) practice, during which applicants for education learn to demonstrate tolerance, empathy, the ability to establish cooperation with a patient/client, colleagues, demonstrate leadership qualities, work in critical conditions and think logically and systematically.

# 2. INFORMATION SCOPE OF THE EDUCATIONAL COMPONENT

The name of indicators	Branch of knowledge, speciality and education level, EPP	the c	acteristics of discipline ne education
Number of credits – 3	Branch of Knowledge: 22 «Healthcare »	Sele	ective
The total	Specialty:	Year	of preparation:
number of hours – 90	223 «Nursing»		4- th
		Se	emeste
			r
			8- th
		Le	ectures
Hours for full-		12 h.	- h.
time	Education level: the first	Prac	tical, seminar
education: classrooms – 34.	(bachelor's) level	22 h.	- h.
independent	EPP "Nursing"	Ind	ependent work
work of the		56 h.	h.
education		Indivi	dual task: h.
applicant – 56		Type o	f control: credit

# **2.1.** Description of the discipline

# **2.2.1.** Lections

No	Name	Hours	Types of lectures
1	The role of science in the development of society. Scientific	2	Introductor
	products and their types. The process of forming a scientific		y
	school		
2	Scientific information. Sources of scientific information.	2	Thematic
3	Questioning and its role in collecting primary information.	2	Thematic
4	Development and stages of questionnaires.	2	Thematic
5	Medical and sociological research: forms, types, methods of obtaining statistical information.	2	Thematic
6	Stages of statistical research.	2	Thematic
	Total hours	12	

# 2.2.2. Practical lessons

No	Name	Hours	Methods of studying	Forms of control
1	The role of science in the development of society. Scientific product and its types	4	Presentation, conversation, story - explanation, business game, process modeling, case method	Oral and written survey, test control, individual assignments Final control: credit
2	Scientific information. Sources of scientific information.	4	Presentation, conversation, explanatory story, business game, process modeling, case method	Oral and written survey, test control, individual assignments
3	Medical and sociological research: forms, types, methods of obtaining statistical information.	4	Presentation, conversation, explanatory story, business game, process modeling, case method	Oral and written survey, test control, individual assignments Final control: credit
4	Statistical tables. Layouts. Rules for filling them out. Requirements for the design of illustrations.	4	Presentation, conversation, explanatory story, business game, process modeling, case method	Oral and written survey, test control, individual assignments Final control: credit
5	Epidemiological analysis as an integral part of scientific research: purpose, objectives and design.	4	Presentation, conversation, explanatory story, business game, process modeling, case method	Oral and written survey, test control, individual assignments. Final control: credit
6	Implementation of scientific research results and assessment of their effectiveness: implementation of completed research into the enterprise, effectiveness of scientific research.	2	Presentation, conversation, explanatory story, business game, process modeling, case method	Oral and written survey, test control, individual assignments Final control: credit
Tota	l hours	22		

2.2.3. Independent work

No	Name	Hours	Methods of	Forms of control
			studying	

1	The process of forming a	2	Presentation	Onal and symittan
1	scientific school	2	Trescritation	Oral and written
	Scientific School			survey, test control,
				individual assignments
				Final control: credit
2	Choosing the direction and	4	Presentation	Oral and written
	planning of research work:			survey, test control,
	forming a topic, planning, analyzing theoretical and			individual assignments Final control: credit
	experimental research and			Timal control. credit
	formulating conclusions.			
3	Patent search. Creative activity	4	Presentation	Oral and written
	and intellectual property			survey, test control,
	1 1 2			individual assignments
				Final control: credit
4	Scientific information. Sources	4	Presentation	Oral and written
	of scientific information.			survey, test control,
	Questioning and its role in			individual assignments
	collecting primary information.			Final control: credit
	Development and stages of			Tillal Collifor. Cicuit
5	questionnaires.	4	Donnerstation	0.1.1.1.
	Organization of the scientist's	4	Presentation	Oral and written survey,
	work. Organization of labor in			test control, individual
	scientific activity. Scientist's work			assignments Final
	efficiency. The main features of a			control: credit
	scientist.			
6	Research part on working with	4	Presentation	Oral and written
	students. Student participation in			survey, test control, individual assignments
	scientific research.			Final control: credit
7	Stages of statistical research.	2	Presentation	Oral and written
				survey, test control,
				individual assignments
				Final control: credit
8	The first stage of medical and	4	Presentation	Oral and written survey,
	social research: the purpose and			test control, individual
	objectives of the study.			assignments Final
	Development of a plan and			control: credit
	1 1			
	programs, selection of an object			
	and subject, research base. Unit			
	selection and sample size of the			
	study.	1	D	0.1.1.1
9	Statistical tables. Layouts. Rules	4	Presentation	Oral and written survey,
	for filling them out. Requirements for illustration design.			test control, individual
	for musuation design.			assignments Final
				control: credit

10	The second and third stages of medical and social research. Collection of statistical material. Definition of screening tests and their classification. Definition of anamnestic technologies. Filling out registration cards. Checking the results obtained. Processing and compilation of data using modern mathematical, statistical methods and information tools. Statistical grouping of the results obtained	4	Presentation	Oral and written survey, test control, individual assignments Final control: credit
11	The fourth stage of medical and social research. Analysis of the results obtained. Formulation of evidentiary conclusions.  Development of practical recommendations. Literary and graphic presentation of the results of statistical and social research.  Requirements for the preparation of a list of used sources.	4	Presentation	Oral and written survey, test control, individual assignments Final control: credit
12	Epidemiological analysis as a component of scientific research.  Types and features of epidemiological studies. Goal and tasks	4	Presentation	Oral and written survey, test control, individual assignments Final control: credit
13	Implementation of scientific research results and assessment of their effectiveness: implementation of completed research into the enterprise, effectiveness of scientific research.	4	Presentation	Oral and written survey, test control, individual assignments Final control: credit
14	Scientific publications as a form of publishing the results of scientific research. Preparation and general requirements for writing, designing and defending a scientific product	4	Presentation	Oral and written survey, test control, individual assignments Final control: credit
15	Features of preparing abstracts. Preparation and defense of course work. Defense of the thesis and features of preparation.	2	Presentation	Oral and written survey, test control, individual assignments Final control: credit

16	Making a presentation based on the results of the conducted scientific research. Requirements	2	Presentation	Oral and written survey, test control, individual assignments Final control: credit
	and presentation elements	5.0		Control Creat
	Total hours	56		

**Teaching methods:** lecture, illustration, demonstration, presentation, videos, videos, discussion, business, role-playing, simulation game, modeling of processes and situations, delegation of authority, case method, project method, debate.

# **Control methods:**

<u>Current control:</u> oral survey (individual and frontal); written survey; test control; creative tasks; individual tasks; abstracts; annotations; report; speech on the topic.

Final control: credit.

#### 3. EVALUATION CRITERIA

## 3.1. Assessment of current educational activities (CEA)

The current educational activities of higher education applicants are monitored by the teacher of the academic group after the applicants have mastered each topic of the educational component and grades are given using a 4-point (national) system. For applicants for part-time studies, current grades also include the grade for the completed individual assignment. At the end of the semester, the teacher automatically receives the average grade (accurate to hundredths) on the CEA using the electronic journal of the ASD system.

Assessment of current and general educational activities (CEA, GEA):

Evaluation of applicants for higher education is carried out in accordance with the "Instructions for assessing the educational activities of applicants for higher education in KhNMU" (Order of KhNMU №181 from 21.08.2021).

The final score for the GEA in the semester is determined as the arithmetic average of national grades for each lesson, rounded to 2 decimal places. The amount of points for the research work also includes the assessment for the individual work done. According to the specified Instructions, the recalculation of the average grade for general educational activity (GAL) into a multi-point scale for the educational component ending with a test is carried out in accordance with Table 1.

Table 1
Recalculation of the average grade for the current activity into a multi-point scale (for disciplines ending with credit)

disciplines ending with credit)							
	200-			200-			200-
4-бальна	бальна		4-бальна	бальна		4-бальна	бальна
шкала	шкала		шкала	шкала		шкала	шкала
5	200		4.22-4,23	169		3.45-3,46	138
4.97-4,99	199		4.19-4,21	168		3.42-3,44	137
4.95-4,96	198		4.17-4,18	167		3.4-3,41	136
4.92-4,94	197		4.14-4,16	166		3.37-3,39	135
4.9-4,91	196		4.12-4,13	165		3.35-3,36	134
4.87-4,89	195		4.09-4,11	164		3.32-3,34	133
4.85-4,86	194		4.07-4,08	163		3.3-3,31	132
4.82-4,84	193		4.04-4,06	162		3.27-3,29	131
4.8-4,81	192		4.02-4,03	161		3.25-3,26	130
4.77-4,79	191		3.99-4,01	160		3.22-3,24	129
4.75-4,76	190		3.97-3,98	159		3.2-3,21	128
4.72-4,74	189		3.94-3,96	158		3.17-3,19	127
4.7-4,71	188		3.92-3,93	157		3.15-3,16	126

4.67-4,69	187	3.89-3,91	156	3.12-3,14	125
4.65-4,66	186	3.87-3,88	155	3.1-3,11	124
4.62-4,64	185	3.84-3,86	154	3.07-3,09	123
4.6-4,61	184	3.82-3,83	153	3.05-3,06	122
4.57-4,59	183	3.79-3,81	152	3.02-3,04	121
4.54-4,56	182	3.77-3,78	151	3-3,01	120
4.52-4,53	181	3.74-3,76	150	Менше 3	Недостатньо
4.5-4,51	180	3.72-3,73	149		
4.47-4,49	179	3.7-3,71	148		
4.45-4,46	178	3.67-3,69	147		
4.42-4,44	177	3.65-3,66	146		
4.4-4,41	176	3.62-3,64	145		
4.37-4,39	175	3.6-3,61	144		
4.35-4,36	174	3.57-3,59	143		
4.32-4,34	173	3.55-3,56	142		
4.3-4,31	172	3.52-3,54	141		
4,27-4,29	171	3.5-3,51	140		
4.24-4,26	170	3.47-3,49	139		

Conducting and assessing the final lesson.

The final lesson (FL) is held as scheduled, during the last lesson. The final lesson involves test tasks that are submitted to the software and must be reviewed in full during practical classes with an explanation of their educational essence, etc.

Assessment of the development of practical skills, given in Table 2 "Criteria for assessing the learning outcomes of education applicants by educational components", in particular the assessment of applied practical skills.

Table 2
Criteria for assessing the results of educational activities
applicants by educational component

Grade	Evaluation criteria
"Great"	The education applicant displays special creative abilities, knows how to independently acquire knowledge, finds and processes the necessary information without the help of a teacher, knows how to use acquired knowledge and skills to make decisions in non-standard situations, convincingly argues answers, and independently reveals his own talents and inclinations.
"Very good"	The education applicant is fluent in the amount of material he has studied, applies it in practice, freely solves exercises and problems in standard situations, and independently corrects mistakes, the number of which is insignificant.
"Fine"	The education applicant is able to compare, summarize, and systematize information under the guidance of a teacher; in general, independently apply it in practice; control your activities; correct errors, including significant ones, select arguments to confirm opinions
"Satisfactorily"	The education applicant reproduces a significant part of the theoretical material, reveals knowledge and understanding of the main provisions; with the help of a teacher, can analyze educational material, correct errors, among which there are a significant number of significant
"Enough"	The education applicant has educational material at a level above the primary

	level, a significant part of it is reproduced at the reproductive level
"Unsatisfactory"	The education applicant has the material at the level of individual fragments,
with the possibility	constituting an insignificant part of the educational material.
of re-compiling a	
semester control	
"Unsatisfactory"	The education applicant has material at the level of elementary recognition and
with mandatory	reproduction of individual facts, elements, objects
re-study of the	
credit	

When assessing the applicant's knowledge included in the final lesson (FL), a grade is given on a national scale, which is considered as a grade according to the GEA. (Table 3)

Grading scale at KhNMU

Table 3

Grading beare at 1mi (1/12			
Grading	ECTS score	Grading on	
on a 200 point scale		a four-point (national) scale	
180–200	A	Great	
160–179	В	Fine	
150–159	С	Fine	
130–149	D	Satisfactorily	
120–129	Е	Satisfactorily	
Less 120	F, Fx	Unsatisfactory	

A grade for the educational component will only be given to applicants who are enrolled in all classes, including the final class.

## 3.1. Questions for credit:

- 1. Scientist and their role in conducting scientific research. Organization of his work.
- 2. Individual plan and its approval.
- 3. Organization of the work of a scientist in scientific research. Determining the research program.
  - 4. Parts of a scientist's work schedule. Approval of the schedule.
  - 5. Principles of labor organization in scientific activities. Teamwork.
  - 6. Systematization of the results of scientific research.
  - 7. Methods for obtaining statistical information. Method of direct observation.
  - 8. The essence of the report when disclosing the essence of this research work.
  - 9. Incomplete research and its types.
- 10. Sequence of performing a medical-statistical study. Elements of the first stage of statistical research.
- 11. The elements provide for a research program and a collection program for the first stage of scientific research.
  - 12. Statistical tables, main concepts and elements. Advantages of the tabular method.
  - 13. Composition of statistical tables. Rules for their construction.
  - 14. Types of statistical tables. Group table.
  - 15. Stages of constructing a full-fledged statistical table. Characteristics of the second stage.
  - 16. Construction of statistical tables of the fourth stage. Formation of the predicate of the table.
  - 17. Economic efficiency of scientific research.
  - 18. Selective observations and their purpose.

- 19. Types of effectiveness of research work.
- 20. Economic effect of research work.
- 21. Master's thesis as a qualifying study. Structure of master's thesis.
- 22. Stages of the process of completing coursework.
- 23. Sequence of course work defense.
- 24. Course work and its parts. Divisions of the main part of the work.
- 25. Thesis and main tasks and general requirements.

## 3.2. Control questions:

- 1. Define the content of science depending on the roles performed in society. Name the processes of science as human activities.
  - 2. Describe the existing functions of science.
  - 3. What, in your opinion, is the object and subject of science?
  - 4. Define scientific activity and list its forms.
  - 5. Describe what scientific studies is. Describe its sections.
- 6. Describe the constituent elements of the structure of the theory (concept, principles, postulate, rule, fact, concept, terms, categories).
  - 7. How are sciences classified? Its purpose, purpose and methods of construction.
- 8. Give a description of the organization of science and the National Academy of Sciences of Ukraine.
  - 9. Describe the subjects of research activities at the university.
  - 10. What forms of research work do you know?
  - 11. Reveal the essence of the concept of student research work.
  - 12. Describe the objectives of students' research work.
  - 13. How are the forms of organizing students' research work at a university qualified?
- 14. Describe the research work of students in the educational process and the types of educational and research work of students.
  - 15. What is the role of seminars in the research work of students at a university?
- 16. What is a thesis and practical training as the highest degree of student participation in research work?
  - 17. How is the work of the student scientific circle and student bureau organized?
- 18. Who can be the supervisor of students' research work at a university? Its organization and planning.
  - 19. What is the rational working regime of a researcher?
  - 20. What does the scientific organization of a scientist's workplace consist of?
- 21. How is the effectiveness of a scientist's scientific work measured? What factors influence this effectiveness?
  - 22. Define the concepts of "scientific research", "research process".
  - 23. Define the concepts "method", "methodology", "methodology".
  - 24. Describe the process of scientific research
  - 25. Describe the organizational stage.
  - 26. Reveal the essence of the experimental stage of scientific research.
  - 27. What stages of research work do you know?
  - 28. Name the types of literary sources of economic information used in scientific research.
  - 29. What is information at the stages of research work? Functions and sources of information.

- 30. How are the results of scientific research classified?
- 31. What is the sequence of placement of literary sources in the list of used literature?

#### 3.3. Individual tasks:

Individual work of applicants under the guidance of a teacher on the educational component "Methodology of Research Work" is carried out during the semester in the form of: studying literary sources and Internet resources recommended for mastering topics and solving educational problems, preparing reports or essays on them; performing situational tasks and practical exercises on various topics of the educational component, performing tasks (analytical, search).

Applicants for correspondence courses must complete an individual assignment and send it for review to the teacher (by e-mail) no later than

Five days before the start of the training session. The work involves the student searching and processing theoretical and analytical material to study and systematize, make generalizations and formulate substantiated conclusions.

The task for individual creative work is selected by the applicant from the list proposed by the teacher. A topic can also be independently proposed, in accordance with his scientific or educational interests. This topic must be agreed upon with the teacher.

# Suggested topics for individual creative tasks:

- 1. The subject and essence of science as a sphere of human activity
- 2. Conceptual apparatus, content and classification of sciences
- 3. Organization of scientific activities in Ukraine
- 4. The process of scientific research, its characteristics and stages of implementation
- 5. Research activities of students
- 6. Selection of topic and implementation of scientific research
- 7. Research effectiveness
- 8. The concept of research methodology, types and functions of scientific research
- 9. Methods and techniques of scientific research
- 10. Methods of empirical research
- 11. Research methods at the empirical and theoretical levels
- 12. The concept of scientific information and its role in scientific research
- 13. Observation as a method of scientific research.
- 14. Survey as a method of scientific research.
- 15. Testing as a method of scientific research.
- 16. Methods of mathematical statistics in scientific research of physical problems education and sports
  - 17. Sources of information and their use in research work
  - 18. Techniques for working with specialized literature
  - 19. General provisions for completing coursework and final papers
  - 20. Coursework and diploma work, features of implementation
  - 21. Stages of work on research and preparation of coursework and diploma work
  - 22. Defense of the thesis
  - 23. Master's thesis as qualifying research
  - 24. Scientific publication: concept, functions, main types
  - 25. Scientific monograph, scientific article, abstract of a report
  - 26. Abstract, report, speech, books
  - 27. Scientific apparatus of scientific research.

- 28. Structure of the descriptive part of the results of scientific research.
- 29. Design rules for the list of used sources.
- 30. Methodology for preparing and designing publications for publication
- 31. Reporting forms for scientific research

### 3.6. Rules for appealing the grade

In the Regulations on the appeal of the results of the final control of education applicants of the Kharkov National Medical University (hereinafter referred to as the Regulations), the term appeal is used in the meaning:

Appeal – appeal by education applicants against the results of the final control.

Appealing the results of the final control of knowledge of education applicants is an integral part of the organizational support of the educational process.

The appeal is considered to examine the objectivity of the assessment. The main task of the appeal procedure is to overcome elements of subjectivity when assessing the knowledge of education applicants, avoiding misunderstandings and controversial situations, creating receptive conditions for the development and real provision of the legal rights and interests of students.

The regulations regulate the procedure for creating an appeal commission, define the principles of work, and the appeal procedure.

The Appeal Commission works on the basis of democracy, creating the most favorable conditions for development and truly ensuring transparency, objectivity and openness in accordance with the legislation of Ukraine.

Applicants for higher education have the right to appeal the final grade awarded in the education component.

Unsatisfactory grades received by an education applicant in the absence of a final test without a good reason (in accordance with the procedure established at the university) are not subject to appeal.

Controversial issues regarding the assessments obtained during the certification process are considered by the examination committee.

# Procedure for creation and composition of the appeal commission

The appeal commission is created to resolve controversial issues that arose during the final control and consideration of the appeal of KhNMU education applicants.

The appeal commission is created by order of the rector of KhNMU in the event of a written application from an education applicant to appeal the results of the final control.

On behalf of the rector, the head of the relevant dean's office, institute, head of graduate school, doctoral studies and clinical residency prepares a draft order on the creation of an appeal commission; the draft determines the chairman of the commission, deputy chairman of the commission, members of the commission, and the secretary of the commission.

The appeal commission includes the vice-rector for scientific or scientific-pedagogical work, the director of the educational and scientific institute for the quality of education, the head of the educational and methodological department, the head of the corresponding dean's office, the institute, the head of graduate school, doctoral studies and clinical residency, the guarantor of the educational program, scientific and pedagogical workers who are involved in the implementation of the relevant educational program (including those teaching the educational component, the assessment of which is controversial, but did not conduct the final control of this applicant), representatives of student government. The appeal commission consists of at least 5 people.

The chairman of the appeal commission is personally responsible for organizing the work of the appeal commission, timely and objective consideration of appeal applications of education applicants on the results of the final control, case management, and compliance with the established document flow procedure.

A meeting of the appeal commission is considered valid if at least two-thirds of its members are

present.

Each meeting of the appeal commission is recorded. The minutes of the meeting are sealed with the signatures of the chairman and members of the appeal commission present at this meeting. Responsibility for maintaining the minutes of the meeting of the appeal commission rests with the secretary of the commission (a sample Minutes of the meeting of the appeal commission is given in Appendix 1 to these Regulations)

The work of scientific and pedagogical workers in the appeal commission is carried out within the framework of organizational work and is included in the corresponding section of the individual plan.

# Procedure for filing an appeal

Before the start of the final control, the head of the relevant dean's office, institute, head of graduate school, doctoral studies and clinical residency brings to the attention of applicants for education the contents of this Regulation.

The application for appeal (hereinafter referred to as the application) is submitted by the education applicant personally in writing no later than the next day after the announcement of the results of the final control. (A sample application for appeal is given in Appendix 2 to these Regulations).

The applicant for education submits an application to the appropriate dean's office, institute, department of graduate school, doctoral studies and clinical residency in which he is studying. The head of this unit registers the application in the educational and methodological department and provides the education applicant with the date and place of the meeting of the appeal commission.

If an education applicant who disputes the results of the final control wishes to add additional documents to the application, then he must do this when submitting the application (no additional written work is provided).

The application must be considered at a meeting of the appeal commission no later than the next two working days after its submission.

An application submitted within the established time frame is subject to consideration.

The application is registered in the application register, which is stored in the educational and methodological department.

A copy of the registered application and an extract from the order on the creation of the appeal commission and the minutes of its meeting are attached to the personal file of the education applicant.

# **Procedure for consideration of the application**

Applications are considered at a meeting of the appeal commission. Several applications may be considered at one meeting of the appeal commission.

The education applicant who has submitted an application has the right to attend all meetings of the appeal commission when considering his application. In the event of his absence, the secretary of the commission must make a corresponding entry in the minutes of the meeting.

To consider the application by the head of the relevant dean's office, institute, head of graduate school, doctoral studies and clinical residency, the original written work of the education applicant for the final control, a printed version of computer testing, journals of work by the academic group, etc. are submitted to the appeal commission.

When considering an application for final control, which was carried out in writing, repeated or additional questioning of the education applicant by the appeal commission is prohibited. The appeal committee reviews and analyzes the written work based on the assessment criteria for the relevant educational component.

When considering an application regarding the final control, which was carried out orally, the education applicant, by decision of the appeal commission, may be given the opportunity to re-compile the final control during a meeting of the appeal commission for a new ticket, from a set of tickets from the educational component. For the sake of objectivity and transparency, the ticket on which the applicant first compiled the final control is removed from the set.

Decisions of the appeal commission are made by a majority vote of the total composition of the

commission. With an equal number of votes "for" and

"Against" is a decision supported by the chairman of the commission.

The result of consideration of the application is the adoption by the appeal commission of one of two decisions:

- the preliminary assessment of the education applicant's knowledge at the final control corresponds to the level of quality of his knowledge in this educational component and does not change;
- the preliminary assessment of the education applicant's knowledge at the final control does not correspond to the level of quality of his knowledge in this educational component and deserves a different assessment (a new assessment is indicated in accordance with the current assessment scale for the results of the final control at KhNMU), but not lower than that obtained at the final control, according to which an application has been submitted.

If, as a result of consideration of the application, the appeal commission decides to change the preliminary results of the final control, a new assessment of the education applicant's knowledge is set in accordance with the scale for assessing the results of the final control of KhNMU, first in the minutes of the meeting of the appeal commission, and then changed by proofreading - in written work, in the information success and grade book (individual curriculum) of the education applicant).

In this case, the following entry is made: "The assessment was changed based on the decision of the appeal commission dated (date), protocol No.," the chairman of the appeal commission (signature).

The decision of the appeal commission is recorded in the Application Register.

After the end of the meeting of the appeal commission, the minutes of the meeting are signed by all members of the appeal commission.

The results of the appeal are announced to the applicant immediately after the consideration of his application is completed. The education applicant makes an entry in the minutes of the meeting of the appeal commission about receiving the results of the consideration of his application.

The decision of the appeal commission is final and cannot be appealed.

Documents on the work of the appeal commission:

- appeal statements based on the results of the final assessment;
- appeals register;
- minutes of meetings of the appeal commission are stored in the educational and methodological department in accordance with the document flow standards of KhNMU.

All changes and additions to these Regulations are made by issuing an order of the university rector on introducing appropriate changes and additions or developing a new version of the Regulations.

To approve in accordance with the established procedure the new edition of the "Regulations on the appeal of the results of the final control of education applicants of the Kharkov National Medical University", this Regulation becomes invalid.

# 4. POLICY OF EDUCATIONAL COMPONENT.

The policy of the educational component is to comply with the Code of Ethics concluded by the university community, which defines the basic moral principles (the KNMU Code of Corporate Ethics is presented on the website http://knmu.edu.ua)

According to the current "Instructions for assessing educational activities under the European Credit and Transfer System for organizing the educational process," higher education applicants must receive an assessment for each topic of the educational component. If an applicant misses a training session, he must work it out in accordance with the "Regulations on the procedure for education applicants at the Kharkov National Medical University to complete training sessions." Workouts are carried out daily by the department teacher on duty.

If the applicant does not submit an individual task on time for a valid reason, it is necessary to inform the teacher about this situation and set a new due date. If the applicant does not have time to complete an individual task, he can ask the teacher to postpone the deadline with justification for the reason for late completion (the teacher decides in each specific situation whether it makes sense to extend the deadline and for how long).

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In case of failure to complete assignments during class sessions or failure to complete part of such a class, the teacher issues an unsatisfactory grade, which the applicant must transfer to the teacher in the free time of the teacher and the applicant, which should be pre-assigned.

During a lecture class, applicants for higher education are advised to take notes from the class and maintain a sufficient level of silence.

During practical classes, applicants are expected to have a sufficient level of preparedness for them and to actively participate in the work and fulfillment of the tasks assigned by the teacher. In particular, active participation is expected during classroom discussions; applicants must be prepared to understand the material in detail, ask questions, express their point of view, and debate. During classes it is important:

- respect for colleagues, politeness and good manners,
- tolerance towards others and their experiences,
- sensitivity and impartiality,
- he ability to disagree with an opinion, but respect the personality of the opponent,
- careful argumentation of your opinion and the courage to change your position under the influence of evidence,
- I-statement, when a person avoids unnecessary generalizations, describes his feelings and formulates his wishes based on his own thoughts and emotions,
  - mandatory familiarity with primary sources, preparedness for the lesson.

Creativity in its various forms is encouraged. Applicants for higher education are expected to be interested in various scientific and communication activities in their subject area.

Successful completion of the course requires adherence to academic virtue, knowledge and skill to use in preparing for classes and completing tasks. educational publications and teaching aids, availability of text borrowings.

# **5.** ACADEMIC INTEGRITY.

# **General provisions**

The Code of Academic Virtue of the Kharkov National Medical University (hereinafter referred to as the University) was developed to support the idea of virtue and decent relations between participants in the academic process; promoting the importance of academic virtue; resolved issues on improving the quality of higher education; promoting the development of a positive reputation; increasing the rating of teachers and the competitiveness of university graduates; developing skills for conscientious and correct work with sources of information; compliance with the requirements of scientific ethics and respect for the intellectual property of others; enhancing independence and individuality when creating their works, as well as increasing responsibility for violating generally accepted citation rules.

The main objectives of implementing a policy of academic virtue at the University are: preventing and eliminating cases of academic fraud among education applicants and University teachers, fostering a negative attitude towards plagiarism, and carrying out constant targeted work to develop academic virtue among applicants.

This Code establishes the principles of academic virtue in the educational process, the rights and obligations of participants in the academic process, types of violations of academic virtue and the procedure for their elimination.

Teachers, researchers and students of education who demonstrate a commitment to academic virtue should become role models and raise the standard of educational and scientific activities in general. Violations of the rules of academic integrity must not adversely affect the reputation of the University or diminish the value of educational and scientific degrees earned at the University.

The Code was developed based on the requirements of the current legislation: on the basis of the Constitution of Ukraine, the Laws of Ukraine "On Education", "On Higher Education", "On Scientific and Scientific-Technical Activities", "On Copyright and Related Rights", "On the Prevention of Corruption". When forming the document, the regulatory framework of the Cabinet of Ministers of Ukraine, information on international publications of the Council of Europe were used; the

recommendations of the Ministry of Education and Science of Ukraine on the introduction of ethical codes in Ukrainian educational institutions were taken into account.

The purpose of this Code, within the framework of the educational process and scientific activities, is to popularize the principles of academic virtue among employees and applicants for higher education.

The basic principles of academic virtue in the educational process are:

Legality. In your activities, comply with the Constitution of Ukraine, laws and regulations.

Scientificity. Objectively cover scientific facts, concepts, scientific achievements, and introduce scientific methods.

Honesty and integrity. Avoid the use of false statements.

Mutual trust. Free exchange of ideas and information.

Courtesy and tolerance. Treat others, their thoughts, views, and beliefs with respect and kindness.

Fairness and objectivity. An impartial attitude towards each other, an objective assessment of the results of educational, research and work activities, an impartial consideration of controversial issues, without personal preferences or benefits.

Competence and professionalism. Requires analytical abilities, moral qualities, internal culture, emotional intelligence, knowledge of business etiquette, and high work organization.

Integrity and responsibility. Take responsibility for the results of your activities and fulfill your obligations.

Partnership and mutual assistance. Perception of all participants in the educational process as equal parties.

Safety and well-being. The activities of participants in the educational process should not lead to threats to their lives, health and property of the University.

Social justice and equality. Equal access to education regardless of race, gender, gender identity, sexual orientation, political, religious beliefs, ethnic, social origin, or health status.

Democratic governance. Management of the higher education system and the University must be carried out with the involvement of all relevant participants in the educational process, with the university management morally fulfilling its powers at all levels.

Quality education. Self-improvement and improvement of the education system. All participants in the academic process support the idea of the highest possible quality of education, making every effort to continuously improve the educational system, including through their own professional development.

# **Basic concepts and their definitions**

**The author** is an individual whose creative work results in a work (Article 1 of the Law of Ukraine "On Copyright and Related Rights" dated December 23, 1993 No. 3792 - XII).

Applicants for higher education are persons studying at a university at a certain level of higher education with the aim of obtaining an appropriate degree and qualification (Article 1 of the Law of Ukraine "On Higher Education" dated 07/01/2014 No. 1556 - VII).

**A creation** is the result of scientific or educational and methodological activity of the author (coauthors) presented to the University on paper or in electronic form, published on the Internet or on the official website of the university in the form of a monograph, textbook, textbook, article, abstract, preprint, abstract and manuscript of a dissertation (dissertation), diploma work, course work or project, abstract, essay, test, etc.

**Disclosure of a creation** is an action performed with the consent of the author or other subject of copyright and (or) related rights that makes the work available to the public for the first time through publication, public performance, public display, public demonstration, public notification, etc. (Article 1 of the Law of Ukraine "On Copyright and Related Rights" dated December 23, 1993 No. 3792 – XII).

**Plagiarism** is the publication (publication), in whole or in part, of someone else's work under the name of a person who is not the author of this work (Article 50 of the Law of Law "On Copyright and Related Rights" dated December 23, 1993 No. 3792 - XII).

**Academic plagiarism** is the deliberate reproduction, in part or in full, of scientific results obtained by others as the results of one's own research, or the reproduction under one's own name of published works or other results of intellectual work created by others without appropriate reference. (Article 69 of

the Law of Ukraine "On Higher Education" dated 07/01/2014 No. 1556 - VII).

**A quotation** is a relatively short excerpt from a literary, scientific or any other published work that is used, with obligatory reference to its author and sources of citation, by another person in his work in order to make clearer his statements or references to the views of another author in an authentic formulation. (Article 1 of the Law of Ukraine "On Copyright and Related Rights" dated December 23, 1993 No. 3792 – XII).

The indicator of the originality of a work is a similarity coefficient, expressed as a percentage, reflecting the level of borrowing in the document and determining the ratio of the number of highlighted words to the total number of words in the document.

The Politics of Academic Virtue Academic virtue is a set of ethical principles and rules defined by law that must guide participants in the educational process during learning, teaching and scientific (creative) activities in order to ensure confidence in the results of learning and/or scientific (creative) achievements.

# Observance of academic virtue by pedagogical, scientific-pedagogical and scientific workers provides for:

objective and impartial assessment of the knowledge and skills of education applicants (higher education applicants); compliance with the rules for citing sources of information when borrowing ideas, statements, writing teaching materials, scientific papers, etc.; monitoring compliance with academic virtue by applicants for higher education; compliance with legislation on copyright and related rights; informing higher education applicants about the main criteria for identifying plagiarism and responsibility for its use; carrying out activities among education seekers to prevent cases of plagiarism. providing reliable information about research methods and results, sources of information used and one's own pedagogical (scientific, pedagogical, creative) activities; The academic virtue of applicants for higher education includes: use in educational or research activities only verified and reliable sources of information and correctly refer to them; compliance with the rules of citing sources of information when borrowing ideas, statements, writing teaching materials, scientific papers, etc. independent completion of educational tasks, tasks of current and final monitoring of learning outcomes (for persons with special educational needs, this requirement is applied taking into account their individual needs and capabilities); compliance with legislation on copyright and related rights; providing reliable information about the results of one's own educational (scientific, creative) activities, research methods and sources of information were used.

## It is considered a violation of academic virtue:

- *academic plagiarism* publication (in part or in full) of scientific (creative) results obtained by other persons as the results of one's own research (creativity) and/or reproduction of published texts (published works of art) of other authors without attribution;
- self-plagiarism publication (in part or in full) of one's own previously published scientific results as new scientific results;
  - *fabrication* the creation of data or facts used in the educational process or scientific research;
- falsification deliberate change or modification of existing data relating to the educational process or scientific research;
- *cheating* performing written work using external sources of information other than those permitted for use, in particular when assessing learning outcomes;
- *deception* provision of knowingly false information about one's own educational (scientific, creative) activities or organization of the educational process;
- *bribery* provision (receipt) by a participant in the educational process or offer to provide (receive) funds, property, services, benefits or any other benefits of a material or intangible nature with the aim of obtaining an undue advantage in the educational process, receiving payment for

accommodation in dormitories, permission to use material and technical base of the University (if this includes a list of paid services);

- *biased assessment* deliberate overestimation or underestimation of the learning outcomes of education applicants.
- involvement of dummies in the list of authors of scientific (creative) or educational work, participation of such persons in the current or final assessment of knowledge;
- forced charitable contributions and forced labor forcing participants in the academic process to pay money or perform certain work under the threat of deliberately harming the interests and rights of the education applicant in studies or other matters.
- the emergence of situations that entail a conflict of interest a real and potential contradiction between the personal, property, non-property interests of the person himself or those close to him and his powers, the presence of which may affect the objectivity of decision-making, as well as the commission or non-commission of actions in the performance of the provided him powers;
- *abuse of authority* use of official position, family ties to gain advantages in the educational, scientific or administrative sphere.

# For violation of academic virtue, teaching, scientific-pedagogical and scientific workers of educational institutions can be held to the following academic liability:

refusal to award an academic degree or award an academic title;

deprivation of an awarded scientific (educational and creative) degree or assigned academic title; refusal to assign or deprive an assigned pedagogical title or qualification category;

deprivation of the right to participate in the work of bodies specified by law or to occupy positions specified by law.

# For violation of academic virtue, applicants may be subject to the following academic liability:

re-taking the assessment (test, exam, test, etc.);

repeated completion of the relevant educational component of the educational program;

expulsion from an educational institution (except for persons receiving general secondary education);

deprivation of an academic scholarship;

deprivation of tuition benefits provided by the educational institution.

**Types of academic responsibility** (including additional and/or detailed) of participants in the educational process for specific violations of academic virtue are determined by special laws and/or internal regulations of the educational institution, which are approved (agreed upon) by the Academic Council of the university and agreed upon with the relevant self-government bodies of applicants for their responsibility.

## The procedure for identifying and establishing facts of violation of academic virtue.

Each person who has been found to have violated academic virtue has the following rights:

- familiarize yourself with all materials of the inspection to establish the fact of violation of academic integrity, submit comments to them;
- personally or through a representative, provide oral and written explanations or refuse to provide any explanations, participate in the study of evidence of violation of academic integrity;
- know about the date, time and place and be present when considering the issue of establishing the fact of violation of academic virtue and bringing it to academic responsibility;
  - appeal the decision to impose academic liability to the body authorized to consider appeals, or to

the court.

The forms and types of academic responsibility of educational institutions are determined by special laws.

For actions (inaction) recognized as a violation of academic virtue, a person may be brought to other types of liability on the grounds and in the manner prescribed by law.

# Ethical standards of educational and scientific activities

Violations of ethical standards of educational and scientific activities are:

academic forgery and fabrication, publication of fictitious research results; attributing the results of collective activity to one or individuals without agreement with other members of the team of authors or inclusion in the list of authors of scientific or educational work who did not participate in the creation of the scientific product; publication (in part or in full) of scientific results obtained by others as a result of one's own research; providing knowingly false information about one's own educational (scientific) activities or organization of the educational process, including when filling out a questionnaire to formulate a rating of scientific and pedagogical workers; the use of borrowed texts in written works without indicating all sources of borrowings; use of other people's materials in your own work, including those from the Internet, without proper references; quoting material created by another person, whether published or not, without proper adherence to citation rules; presenting as your own work (essay, term paper, graduation project, abstract of an article, laboratory work, etc.) material obtained from the Internet or from third parties; links to sources not used in the work; reuse of written work previously completed by another person; re-publication of own scientific results; translation of other people's (or one's own) texts from one language to another.

# **Final provisions**

Members of the university community are required to know the Code of Academic Integrity of the Kharkov National Medical University.

The fact that participants in the academic process are familiarized with the text of the Code and their obligations to comply with it is implemented by including the main provisions of this document in the employment contracts of University employees, as well as in agreements (contracts) between the University and education applicants.

All changes and additions to this Code are considered and approved at a meeting of the Academic Council of KhNMU, after which the new edition of the "Code of Academic Virtue of the Kharkov National Medical University" is approved by order of the rector of the university.

When a new edition of the Code is approved, the previous one comes into force

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#### 7. INFORMATION RESOURCES

- 1. World Health Organization www.who.int
- 2. State Scientific and Pedagogical Library of Ukraine named after V.O. Sukhomlynskyi -- http://www.dnpb.gov.ua/
  - 3. European database "Health for all" www.euro.who.int/ru/home
  - 4. British Medical Journal www.bmj.com
  - 5. Journal of Evidence-Based Medicine www.evidence-basedmedicine.com
  - 6. Canadian Center for Evidence in Health Care www.cche.net
  - 7. Cochrane Library www.cochrane.org
  - 8. Cochrane Center for Evidence-Based Medicine www.cebm.net

- 9. Population of Ukraine. Demographic yearbook. K.: Derzhkomstat of Ukraine. (access mode: www.ukrstat.gov.ua).
  - 10. Scientific library of Kharkiv National Medical University http://libr.knmu.edu.ua/
- 11. Scientific pedagogical library named after K.D. Ushinsky Russian Academy of Education -- http://www.gnpbu.ru/
  - 12. National Library of Ukraine named after V.I. Vernadsky -- http://www.nbuv.gov.ua/
  - 13. US National Library of Medicine MEDLINE www.ncbi.nlm.nih.gov/PubMed
  - 14. National Scientific Medical Library of Ukraine -- http://www.library.gov.ua/
- 15. Ukrainian database of medical and statistical information "Health for all": http://medstat.gov.ua/ukr/news.html?id=203
  - 16. Kharkiv State Scientific Library named after V.G. Korolenko http://korolenko.kharkov.com/
  - 17. Public Health Center of the Ministry of Health of Ukraine www.phc.org.ua
  - 18. Center for Disease Control and Prevention www.cdc.gov
- 19. Central Library of the Pushchinsky Scientific Center of the Russian Academy of Sciences -- http://cbp.iteb.psn.ru/library/default.html
- 20. Central scientific medical library of the First Moscow State Medical University named after I.M. Sechenov -- http://elibrary.ru/defaultx.asp
  - 21. U.S. National Library of Medicine http://www.nlm.nih.gov/

#### 8. OTHER

Useful links:

- 1. Provisions on the prevention, prevention and settlement of cases related to sexual harassment and discrimination at KhNMU http://files.knmu.edu.ua:8181/upload/redakt/doc\_uchproc/polog-sex.doc
- 2. Regulations on academic integrity and ethics of academic relationships at the Kharkiv National Medical University

http://files.knmu.edu.ua:8181/upload/redakt/doc\_uchproc/polog\_ad\_etyka\_text.pdf

- 3. The procedure for conducting classes on in-depth study by students of the Kharkiv National Medical University of certain disciplines beyond the scope of the curriculum http://files.knmu.edu.ua:8181/upload/redakt/doc\_uchproc/nak-poriad-pogl-vyv-dysc.docx
- 4. Provisions on the Commission on Academic Integrity, Ethics and Conflict Management of KhNMU http://files.knmu.edu.ua:8181/upload/redakt/doc\_uchproc/polog\_komis\_ad\_text.pdf
- 5. Regulations on recognition of the results of non-formal education at the Kharkiv National Medical University http://files.knmu.edu.ua:8181/upload/redakt/doc\_uchproc/polog\_neform\_osv.pdf
  - 6. INCLUSIVE EDUCATION:

 $http://www.knmu.kharkov.ua/index.php?option=com\_content\&view=article\&id=7108\%\,3A2021-03-10-14-08-02\&catid=12\%\,3A2011-05-10-07-16-32\&Itemid=33\&lang=en$ 

7. ACADEMIC INTEGRITY:

http://www.knmu.kharkov.ua/index.php?option=com\_content&view=article&id=2520%3A2015-04-30-08-10-46&catid=20%3A2011-05-17-09-30-17&Itemid=

40&lang=enhttp://files.knmu.edu.ua:8181/upload/redakt/doc\_uchproc/kodex\_AD.docx