MINISTRY OF HEALTH OF UKRAINE KHARKIV NATIONAL MEDICAL UNIVERSITY

Department

Epidemiology

10

Academician year

2024 - 2025

SYLLABUS OF THE EDUCATIONAL COMPONENT BIOLOGICAL WEAPONS, BIO-TERRORISM. MEANS OF PROTECTION AND PREVENTION

Optional educational component

The form of education is full-time

Branch of knowledge

22 «Healthcare»

Specialty

223 «Nursing»

Educational and professional program

«Nursing»

The first (bachelor's) level of higher education 4 years of study

Course fourth

The syllabus of the educational component was considered at the meeting of the Department of the Epidemiology

Approved by the methodical commission of KhNMU on Public Health problems medicine

Protocol of

"27" August 2021 № 23

Protocol of

"27" August 2021 № 1

Head of department,

Professor T.O. Chumachenko

Chairman of methodical commission, Professor V.A Ognev

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The location	Kharkiv, Trinklera str, 12	
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Surname, first name, patronymic, position,	Antonina Berezna Assistant of the Epidemiology Department KhNMU	

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academic title, scientific			
degree			
Professional interests, link to	Epidemiology, molecular epidemiology, public health.		
the teacher's profile (on the	https://knmu.edu.ua/departments/kafedra-epidemiologiyi/		
website of the university, the	https://orcid.org/0000-0002-3258-5985		
department, in the Moodle	https://scholar.google.com.ua/citations?user=iALcZPAAAAAJ&hl=uk		
system, etc			
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Teacher's corporate mail	av.berezhna@knmu.edu.ua		
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INTRODUCTION

1. Description of the component

Syllabus of the educational component "BIOLOGICAL WEAPONS, BIO-TERRORISM. MEANS OF PROTECTION AND PREVENTION" was compiled in accordance with the educational and professional program (hereinafter - EPP) "Nursing" and the Standard of Higher Education of Ukraine (hereinafter - Standard), first (bachelor's) level, fields of knowledge 22 "Health care", specialty 223 «Nursing»

Description of the educational component (abstract)

This educational component contributes to the formation among students of education of a sufficient level of knowledge about the possibility of using pathogens of infectious diseases as weapons of mass destruction, that is, biological weapons. The existence of the human population has always been accompanied by wars, and today is no exception, there are currently 26 wars in the world, including Ukraine, which is at war with russia. Despite the ban on the production, testing, stockpiling, storage of biological weapons, some countries

continue to develop biological weapons, there is a risk of using biological weapons at any time, which is a threat to the national security of any country. In addition, in peacetime, certain groups carry out terrorist attacks using pathogens of infectious diseases, that is, medical workers may encounter victims of bioterrorism or bio sabotage. Therefore, measures and means of protection and prevention of people and the environment from biological weapons are the most relevant for medical workers.

The subject of study of the educational component is biological weapons, measures and means of protection and prevention of the environment, the military and the population in conditions of war and in peacetime.

Interdisciplinary connections: "Biological weapons, bioterrorism. Means of protection and prevention" is based on the knowledge obtained by the student of higher education while studying other basic disciplines - medical biology, microbiology, virology and immunology, infectious diseases, biostatistics, public health medicine, epidemiology,

Prerequisites - Fundamentals of medical biology and microbiology, epidemiology,

Postrequisites, Biological safety and biological defense in wartime and peacetime

1. PURPOSE AND TASKS OF THE COMPONENT

1.1. The purpose of studying the component is the formation of knowledge about the features of biological weapons, the importance of biological weapons indication, the organization and implementation of the system of biological protection of the military, the population, and the environment in conditions of war and in peacetime.

1.2. The main objectives of the component are:

- 1. To acquire general knowledge about biological weapons, their features;
- 2. Know the main pathogens of infectious diseases that can be used as potential weapons of mass destruction (biological weapons);
- 3. Know the basic principles of organizing and carrying out anti-biological protection of troops and the population in war and peacetime.

Competences and learning outcomes, the formation of which is facilitated by the component

According to the requirements of the standard, the component provides acquisition by students competencies:

integrated: A bachelor of nursing is able to solve complex specialized tasks 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 the complexity and uncertainty of conditions.

general:

- GC 01. The ability to realize one's rights and responsibilities as a member of society, to realize the values of a civil (free democratic) society and the need for its sustainable development, the rule of law, the rights and freedoms of a person and a citizen in Ukraine.
- GC 03. Ability to abstract thinking, analysis and synthesis
- GC 04. Ability to apply knowledge in practical situations
- GC 05. Knowledge and understanding of the subject area and understanding of professional activity
- GC 10. Ability to make informed decisions

special (professional, subject):

- PC 06. Ability to effectively apply a set of professional skills (skills), medical devices, interventions and actions in assessing the functional state of patients/clients, preparing them for diagnostic studies and taking biological material for laboratory studies.
- PC 07. Preservation of the specialist's own health when providing care, performing manipulations and procedures, when moving and transporting the patient/client.

- PC 08. Preventive activities of a nurse aimed at preserving and strengthening health, preventing diseases and informing and educating the patient and his family members.
- **1.3.2.** The study of the component provides students with the acquisition of the following program learning outcomes:
- PLO 8. To perform medical manipulations in order to ensure a sanitary and anti-epidemic regime.
- PLO 17. Plan and carry out preventive and anti-epidemic measures regarding infectious diseases.
- PLO18. Organize and conduct training of patients and their family members on medical issues.
- PLO 19. Conduct medical and hygienic propaganda.
- PLO 20. Appropriate medical documentation should be kept
- **1.3.3.** The study of the component provides students with the following social skills (Soft skills):

the ability to express one's opinion clearly

the ability to determine the essence of the problem and its causes

the ability to find relevant information and reliable sources

the ability to choose the optimal solution

the ability to distinguish facts from myths, stereotypes and personal perceptions

2. INFORMATION SCOPE OF THE COMPONENT

Name indicators	Branch of knowledge, specialty, educational degree, EPP	Characteristics of the component
Number of credits – 3,0	Branch of knowledge 22 "Health Care"	Daily form of education Optional
	Specialty:	course:
Total number of hours	_223 "Nursing"	Semester
-90	(code and name)	3th/4th
		Lectures
		2 hours
		Practical classes
Hours for full-time	the first (bachelor's) level	30 hours
study:	of higher education	Laboratory classes
classrooms - 32 self-work of the		0 hours
	EPP «Nursing»	Self-work
applicant - 58		58 hours год.
		Individual task:0 год.
		Final control is credit

2.1 Content of the component

2.2.1 Lectures

№	Topic	Hours	Types of lectures
1	Biological weapons: a historical excursion and the current state of the problem.	2	introductory
	Total hours	2	

2.2.3 Topics of practical classes

Practical class Nº	Topics of practical classes	Hours	Methods Learnin g	Forms
1	Biological warfare, biological weapons, biological terrorism. Historical, ethical, modern aspects of the problem. International and national legislation (International Health Regulations (2005); Arms control; the Convention on the Prohibition of Chemical Weapons (1993); Biological and Toxin Weapons Convention;).	4	story-explanation, conversation, presentation, discussion	Current control: oral examination (individual and frontal); written examination; self- control; report; speech on a given topic Final control: credit
2	Biological agents that can be used as biological weapons. Characteristics, properties, classification by degree of danger. Sources of biological agents.	4	story-explanation, conversation, presentation, discussion	Current control: oral examination (individual and frontal); written examination; self- control; report; speech on a given topic Final control: credit
3	Biological threats of the modern world. Risk assessment	4	story-explanation, conversation, presentation, discussion	Current control: oral examination (individual and frontal); written examination; self- control; report; speech on a given topic Final control: credit

4	Recognition and evaluation of events related to biological agents. Key indicators of an event associated with a biological agent. Sanitary - epidemic condition of the territory	4	story-explanation, conversation, presentation, discussion	Current control: oral examination (individual and frontal); written examination; self- control; report; speech on a given topic Final control: credit
5	Combat properties of biological weapons. Methods of transporting biological weapons. Methods of using biological weapons.	4	story-explanation, conversation, presentation, discussion	Current control: oral examination (individual and frontal); written examination; self- control; report; speech on a given topic Final control: credit
6	Organization and implementation of anti-epidemic and preventive measures in the zone of biological contamination. Biological intelligence. Indication of biological weapons. Regularly - restrictive measures.	4	story-explanation, conversation, presentation, discussion	Current control: oral examination (individual and frontal); written examination; self- control; report; speech on a given topic Final control: credit
7	Antibiological protection of the population and troops.	4	story-explanation, conversation, presentation, discussion	Current control: oral examination (individual and frontal); written examination; self- control; report; speech on a given topic Final control: credit
8	Defense of individual independent work. Final test	2	consultation	Final control: credit
Total ho	ours of the practical classes	30		

2.2.4. Laboratory classes

It does not have

2.2.5. Self-work topics

No	Topics	hours	Methods Learning	Forms control
1	Biological warfare, biological weapons, biological terrorism. Historical, ethical, modern aspects of the problem. International and national legislation (International Health Regulations (2005); Arms control; the Convention on the Prohibition of Chemical Weapons (1993); Biological and Toxin Weapons Convention;).	6	story- explanation, conversation, presentation, discussion	Current control: oral examination (individual and frontal); written examination; self-control; report; speech on a given topic Final control: credit
2.	Biological agents that can be used as biological weapons. Characteristics, properties, classification by degree of danger. Sources of biological agents.	6	story- explanation, conversation, presentation, discussion	Current control: oral examination (individual and frontal); written examination; self-control; report; speech on a given topic Final control: credit
3.	Biological threats of the modern world. Risk assessment	6	story- explanation, conversation, presentation, discussion	Current control: oral examination (individual and frontal); written examination; self-control; report; speech on a given topic Final control: credit
4	Recognition and evaluation of events related to biological agents. Key indicators of an event associated with a biological agent. Sanitary - epidemic condition of the territory	6	story- explanation, conversation, presentation, discussion	Current control: oral examination (individual and frontal); written examination; self-control; report; speech on a given topic Final control: credit

5	Combat properties of biological weapons. Methods of transporting biological weapons. Methods of using biological weapons.	6	story- explanation, conversation, presentation, discussion	Current control: oral examination (individual and frontal); written examination; self-control; report; speech on a given topic Final control: credit
6	Organization and implementation of anti-epidemic and preventive measures in the zone of biological contamination. Biological intelligence. Indication of biological weapons. Regularly restrictive measures.	6	story- explanation, conversation, presentation, discussion	Current control: oral examination (individual and frontal); written examination; self-control; report; speech on a given topic Final control: credit
7	Antibiological protection of the population and troops.	6		
8	Defense of individual independent work	12		
9	Final test preparation	4		credit
	Total	58		

3. EVALUATION CRITERIA

3.1 Carried out in accordance with the "Instructions for the evaluation of educational activities in the European credit transfer system for the organization of the educational process (order of KhNMU from 21. 08. 2021 № 181)

Evaluation of current learning activities (CLA)

When assessing the mastery of each subject of the component (CLA), the applicant is graded according to the traditional 4-point system: "excellent", "good", "satisfactory" or "unsatisfactory".

The final score for the current learning activity (CLA) is defined as the arithmetic mean of traditional grades for each lesson, rounded to 2 decimal places and listed in a multi-point scale according to Table 1 (see below).

CLA is considered fulfilled if the applicant in the current semester has completed all missed classes and lectures, and the average score for all topics of the PC is 3 points or higher, in which case the statement is marked "completed" and indicates the average score in 4-point system (is calculated automatically within the functionality of the electronic journal of ACS), or "unfinished", if the applicant in the current semester has unfinished missed classes and lectures, or an average score below 3 points.

The recalculation of the average score for CLA is carried out in accordance with table 2, as the component ends with a credit. The number of points that must be scored by the applicant for higher education for admission to the final test from 129 to 200 points.

The final score for the current educational activities in the semester is defined as the arithmetic mean of national grades for each lesson, rounded to 2 decimal places. Recalculation of the average grade for current educational activities in a multi-point scale is carried out in accordance with table 2. To enroll a student must receive from 120 to 200 points.

Recalculation of the average score for current activities in a multipoint scale (for components ending with a credit)

	200- point
4-point scale	scale
5	200
4.97-4,99	199
4.95-4,96	198
4.92-4,94	197
4.9-4,91	196
4.87-4,89	195
4.85-4,86	194
4.82-4,84	193
4.8-4,81	192
4.77-4,79	191
4.75-4,76	190
4.72-4,74	189
4.7-4,71	188
4.67-4,69	187
4.65-4,66	186
4.62-4,64	185
4.6-4,61	184
4.57-4,59	183
4.54-4,56	182
4.52-4,53	181
4.5-4,51	180
4.47-4,49	179
4.45-4,46	178
4.42-4,44	177
4.4-4,41	176
4.37-4,39	175
4.35-4,36	174
4.32-4,34	173
4.3-4,31	172
4,27-4,29	171
4.24-4,26	170

components enan	ng with a
	200-
	point
4- point scale	scale
4.22-4,23	169
4.19-4,21	168
4.17-4,18	167
4.14-4,16	166
4.12-4,13	165
4.09-4,11	164
4.07-4,08	163
4.04-4,06	162
4.02-4,03	161
3.99-4,01	160
3.97-3,98	159
3.94-3,96	158
3.92-3,93	157
3.89-3,91	156
3.87-3,88	155
3.84-3,86	154
3.82-3,83	153
3.79-3,81	152
3.77-3,78	151
3.74-3,76	150
3.72-3,73	149
3.7-3,71	148
3.67-3,69	147
3.65-3,66	146
3.62-3,64	145
3.6-3,61	144
3.57-3,59	143
3.55-3,56	142
3.52-3,54	141
3.5-3,51	140
3.47-3,49	139

4- point	200- point
scale	scale
3.45-3,46	138
3.42-3,44	137
3.4-3,41	136
3.37-3,39	135
3.35-3,36	134
3.32-3,34	133
3.3-3,31	132
3.27-3,29	131
3.25-3,26	130
3.22-3,24	129
3.2-3,21	128
3.17-3,19	127
3.15-3,16	126
3.12-3,14	125
3.1-3,11	124
3.07-3,09	123
3.05-3,06	122
3.02-3,04	121
3-3,01	120
Less than 3	Not enough

Assessment of individual tasks

At the meeting of the department approved a list of individual tasks with the definition of the number of points for their performance, which can be added as incentives (not more than 10). Points for individual tasks are accrued once only on a commission basis (commission - head of the department, head teacher, group teacher) only if they are successfully completed and defended. The total amount of points may not exceed 200 points.

Assessment of students' self-work

Assimilation of topics that are submitted only for self-work is checked during practical classes and tests.

Grade from the component

The course is studied during the 1st semester. Component ends with a test.

Component assessment technology (Table 3 of the "Instructions for assessing the educational activities of students").

Assessment of the results of the study of components is carried out directly during the test. The grade in the component is defined as the sum of scores on CLA, listed in the 200-point scale according to Table 2 and individual student tasks and is min - 120 to max - 200. Correspondence of grades on the 200-point scale, four-point (national) scale and ECTS scale is given in table 3.

Correspondence of estimates on a 200-point scale, four-point (national) scale and ECTS scale

Table 3

Tour-point (national) scale and EC15 scale		
Rating	Assessment on the	Score for
on a 200-point scale	ECTS scale	four-point (national)
		scale
180–200	A	excellent
160–179	В	good
150–159	С	good
130–149	D	satisfactory
120–129	Е	satisfactory
Less than 120	F, Fx	unsatisfactory

The grade in the component is given only to students who have completed the curriculum in the component in full. Grades "**FX**" or "**F**" ("unsatisfactory") are given to students who are not credited with the study of the component, the form of control of which is credit.

After completing the study of the component responsible for the organization of educational and methodical work at the department or the teacher puts the student's grade on the scales (Table 6) in the record book and fill in the progress of students in the component forms: U-5.03A - credit.

Elimination of academic debt (working off)

Students must complete all missed classes and unsatisfactory grades. At the same time, classes are held within one calendar month from the moment of skipping or receiving an unsatisfactory grade is carried out once without obtaining permission from the dean's office and without payment. At the end of the one-month period, classes are held in accordance with the "Regulations on the procedure for students of Kharkiv National Medical University to study," approved by the order of KhNMU from 07.12.2015 No.415;

3.3 Control questions, tasks for self-work

- 1. What is biological warfare.
- 2. What is biological terrorism.
- 3. What is biological risk.
- 4. Biological agents that can be used as biological weapons.
- 5. Characteristics, properties of biological agents that can be used as biological weapons.
- 6. Classification of biological agents that can be used as biological weapons.
- 7. Sources of biological agents
- 8. International health regulations (2005);
- 9. Arms control; the Convention on the Prohibition of Chemical Weapons (1993);
- 10. Convention on Biological and Toxin Weapons;

- 11. Biological threats of the modern world. Risk assessment
- 12. Medical forces and means to prevent biological risks and threats in the health care system.
- 13. Means of emergency non-specific and specific prevention, organization and implementation of emergency prevention to prevent biological risks.
- 14. Anti-epidemic requirements for accommodation of infectious patients, rules for evacuation of sources of infection outside the epidemic center.
- 15. Anti-epidemic requirements for accommodation of infectious patients affected by biological weapons, rules for evacuation of sources of infection outside the epidemic center.
- 16. Readiness of medical personnel of health care institutions to act in the event of an emergency in peacetime to prevent biological risks.
- 17. Readiness of medical personnel of health care institutions to act in the event of an emergency in wartime to prevent biological risks.
- 18. Material and technical base in case of emergencies. A comprehensive plan for the protection of troops and the population in case of emergencies to prevent biological risks.
- 19. Peculiarities of carrying out anti-epidemic measures in the event of emergency situations under the conditions of the introduction of infections that are of international importance in wartime conditions.
- 20. Peculiarities of carrying out anti-epidemic measures in case of emergency situations under the conditions of the introduction of infections that have international significance in the conditions of war.
- 21. Epidemiology and prevention of plague.
- 22. Epidemiology and prevention of cholera.
- 23. Epidemiology and prevention of smallpox.
- 24. Epidemiology and prevention of anthrax.
- 25. Epidemiology and prevention of Ebola fever.
- 26. Epidemiology and prevention of Lassa fever.
- 27. Epidemiology and prevention of Magburg fever.
- 28. Epidemiology and prevention of Crimean-Congo fever.
- 29. Emergency situation, definition, classification.
- 30. Restrictive measures in the epidemic center.
- 31. Biological exploration, definitions, stages.
- 32. Materials and methods of specific indication and determination of the sensitivity of microorganisms to antibacterial agents.
- 33. Rules for the use of individual and collective means of protection in centers of biological contamination.
- 34. Assessment of the sanitary-epidemic state of the territory.
- 35. Observation and quarantine, features of their organization and conduct, terms of their conduct and end.

3.4 Individual tasks

The individual task includes the development and presentation of a presentation on the organization of preventive and anti-epidemic measures in the focus of a certain epidemic infectious disease. Independent work also includes preparation for practical classes. Processing the material according to the outline. Working with supporting literature. Research and analytical work

PPT-presentation topics:

- 1. Safety of human life and society.
- 2. Cartagena Protocol on Biosafety.
- 3. The concept of biological safety (biosafety). Legislative aspects and scientific bases of biosafety in the world and in Ukraine.
- 4. Characteristics of biological pathogens as potential weapons of mass destruction.

- 5. Epidemiology and prevention of plague. The use of the pathogen as a biological agent of weapons of mass destruction.
- 6. Epidemiology and prevention of cholera. The use of the pathogen as a biological agent of weapons of mass destruction.
- 7. Epidemiology and prevention of smallpox. The use of the pathogen as a biological agent of weapons of mass destruction.
- 8. Epidemiology and prevention of anthrax. The use of the pathogen as a biological agent of weapons of mass destruction.
- 9. Epidemiology and prevention of Ebola fever. The use of the pathogen as a biological agent of weapons of mass destruction.
- 10. Epidemiology and prevention of Lassa fever. The use of the pathogen as a biological agent of weapons of mass destruction.
- 11. Epidemiology and prevention of Magburg fever. The use of the pathogen as a biological agent of weapons of mass destruction.
- 12. Epidemiology and prevention of Crimean-Congo fever. The use of the pathogen as a biological agent of weapons of mass destruction.
- 13. Epidemiology and prevention of tularemia. The use of the pathogen as a biological agent of weapons of mass destruction.
- 14. Epidemiology and prevention of viral encephalitis (eastern and western equine encephalitis). The use of the pathogen as a biological agent of weapons of mass destruction.
- 15. Epidemiology and prevention of botulism. The use of botulinum toxin as a biological agent of weapons of mass destruction.
- 16. Epidemiology and prevention of hantavirus infection. The use of the pathogen as a biological agent of weapons of mass destruction.

Distribution of additional points for winners depending on the type of individual work performed

Type of individual work	Scores
Presentation and publication of theses at conferences with	8 - 10
international participation	
Presentation and publication of theses at conferences in Ukraine	7 - 8
Publication of theses at conferences with international participation	5 - 6
Publication of theses at conferences in Ukraine	4 - 6
Search for epidemiological data	0 - 4
Preparation of an oral message with a presentation in class	2 - 4
Preparation of an oral message in class	0 - 2

3.5 Rules for appealing the assessment

The complaint is submitted to the person responsible for educational and methodical work or the head of the department, discussed at the meeting of the department, students are offered to pass the test before the commission, which includes the head of the department, head of the department, associate professor and / or lecturer of the academic group.

4. COMPONENT POLICY

Academic expectations from higher education students Component requirements It is expected that applicants for higher education will attend all practical classes and complete all sections of independent work. If they missed classes, it is necessary to work it out (according to the schedule on the information stand of the department)

Written and homework must be completed completely and on time, if the applicant has questions, you can contact the teacher in person or by e-mail, which the teacher provides in the first practical lesson.

During the practical classes, the higher education seeker and the higher education seeker are recommended to keep a synopsis of the lesson and keep a sufficient level of silence. Asking questions to the teacher is perfectly normal.

Applicants for higher education must arrive on time, not be late, in class must be dressed in a medical gown, changeable shoes and boot covers are not required, outerwear remains in the wardrobe.

The use of electronic gadgets is allowed if necessary (as a calculator or for visual presentation of information in the form of graphs and charts), but calls can be made only during a break, finding the correct answer using gadgets via the Internet is prohibited.

Behavior in the audience

Basic "yes" and "no"

It is important for a higher education student to follow the rules of good conduct at the university. These rules are common to all, they also apply to all faculty and staff, and are not fundamentally different from the generally accepted norms.

During classes it is allowed:

- leave the audience for a short time if necessary and with the permission of the teacher;
- drink soft drinks;
- take photos of presentation slides;
- take an active part in the course of the lesson (see Academic expectations from higher education seekers). forbidden:
- eat (except for persons whose special medical condition requires another in this case, medical confirmation is required);
- smoking, drinking alcohol and even low-alcohol beverages or drugs;
- use obscene language or use words that offend the honor and dignity of colleagues and faculty;
- gambling;
- damage the material and technical base of the university (damage inventory, equipment; furniture, walls, floors, litter the premises and territories);
- shouting, shouting or listening to loud music in classrooms and even in corridors during classes.

With regard to persons with special educational needs, all students have the right to receive knowledge, including, if necessary, in a distance format.

Recommendations for successful completion of the component - active participation in the discussion in the audience, the student of higher education should be ready to understand the material in detail, ask questions, express their views, discuss. During the discussion it is important:

- respect for colleagues,
- tolerance for others and their experience,
- susceptibility and impartiality,
- the ability to disagree with the opinion, but to respect the identity of the opponent (s),
- careful argumentation of his opinion and the courage to change his position under the influence of evidence,
- self-expression, when a person avoids unnecessary generalizations, describes his feelings and formulates his wishes based on their own thoughts and emotions,
- Mandatory acquaintance with primary sources.

A creative approach in its various manifestations is welcome. Applicants from higher education are expected to be interested in participating in city, national and international conferences, competitions and other events in the subject profile.

Safety precautions

The first lesson of the course will explain the basic principles of labor protection by conducting appropriate training. It is expected that everyone should know where the nearest evacuation exit is, where the fire extinguisher is, how to use it, and so on.

5. ACADEMIC INTEGRITY

The Department of Epidemiology maintains zero tolerance for plagiarism. Applicants for higher education are expected to constantly raise their awareness of academic writing. The first classes will provide information on what to consider plagiarism and how to properly conduct research and scientific research. Additional points are credited for commission for individual educational and research tasks (IDP) for retrospective epidemiological analysis of infectious diseases, and presentation of research results at scientific and practical conferences of various levels (oral report, publication of abstracts, articles in professional journals, poster reports). However, if plagiarism is detected, the points will be canceled and deducted.

6. Recommended Books.

- 1. Gary D. Friedman. Primer of epidemiology. 5-th ed. p. McGraw-Hill: Professional, 2004. 401 p.
- 2. N.O. Vynograd General epidemiology. Kyiv. AUS Medicine Publishing. 2014. 127 p.
- 3. N.O. Vynograd Special epidemiology. Kyiv. AUS Medicine Publishing. 2016. 184 p.
- 4. www.cdc.gov//...//index.html
- 5. Management of biological risks. Manual on laboratory bioprotection http://www.bsseducation.com.ua/sites/default/files/WHO_CDS_EPR_2006_6_ukr_ready_.pdf
- 6. International medical and sanitary regulations (2005) https://www.who.int/ru/publications/i/item/9789241580496
- 7. ISO 35001:2019 "Biorisk Management for Laboratories and Related Organizations"
- 8. Convention on the prohibition of the development, production, stockpiling, use of chemical weapons and on their destruction https://zakon.rada.gov.ua/laws/show/995 182#Text
- 9. Biosafety Manual https://www.mta.ca/uploadedFiles/Community/Research_and_creative/Research_Office/Biosafety/MTA_Biosafety_Manual_July_2017.pdf

7.INFORMATION RESOURCES

- 1. WHO https://www.who.int/ru, https://www.who.int/countries/ukr/ru/
- 2. CDC https://www.multitran.com/c/M.exe?11=1&12=2&s=Centers+for+Disease+Control+
- 3. ECDC https://www.ecdc.europa.eu/en

8.OTHER

Provisions on prevention, prevention and settlement of cases related to sexual harassment and discrimination in KhNMU

http://files.knmu.edu.ua:8181/upload/redakt/doc_uchproc/polog-sex.doc

Regulations on Academic Integrity and Ethics of Academic Relations at Kharkiv National Medical University

http://files.knmu.edu.ua:8181/upload/redakt/doc uchproc/polog ad etyka text.pdf

The order of conducting classes on in-depth study by students of Kharkiv National Medical University of certain components beyond the scope of the curriculum http://files.knmu.edu.ua:8181/upload/redakt/doc_uchproc/nak-poriad-pogl-vvv-dysc.docx

Regulations 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

Regulations on the recognition of the results of non-formal education at Kharkiv National Medical University

http://files.knmu.edu.ua:8181/upload/redakt/doc_uchproc/polog_neform_osv.pdf INCLUSIVE EDUCATION:

 $\frac{\text{http://www.knmu.kharkov.ua/index.php?option=com_content\&view=article\&id=7108\%3A2021-03-10-14-08-02\&catid=12\%3A2011-05-10-07-16-32\&Itemid=33\&lang=uk}{\text{ltemid=33&lang=uk}}$

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=uk

http://files.knmu.edu.ua:8181/upload/redakt/doc_uchproc/kodex_AD.docx