

MINISTRY OF HEALTH OF UKRAINE  
KHARKIV NATIONAL MEDICAL UNIVERSITY

Department                      Epidemiology

Academician year              2023 - 2024

SYLLABUS OF THE ACADEMIC COMPONENT  
**THE ROLE OF THE NURSE IN THE PREVENTION OF HEALTHCARE ASSOCIATED  
INFECTIONS**

Optional educational component

The form of education is full-time

Branch of knowledge            22 «Healthcare»

Specialty                          223 «Nursing»

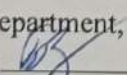
Educational and professional program        «Nursing»

The first (bachelor's) level of higher education

Course second

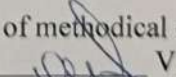
The syllabus of the academic component was  
considered at the meeting of the Department of  
the Epidemiology

Protocol of  
"29" June 2022 № 19

Head of department,  
Professor  T.O. Chumachenko

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

Protocol of  
"30" June 2022 № 10

Chairman of methodical commission,  
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## INTRODUCTION

### 1. Description of the component

Syllabus of the educational component "THE ROLE OF THE NURSE IN THE PREVENTION OF HEALTHCARE ASSOCIATED INFECTIONS " 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»

This component includes information on the relevance of HCAI in the modern world, knowledge of the epidemiology and prevention of the emergence and spread of HCAI, creating a safe environment for patients and staff in organizations that provide medical care. The program of the component is aimed at studying the latest scientific data on the epidemiological features of STIs, ensuring the safety of health care in health care facilities, as well as the use of epidemiological methods to develop scientifically sound measures to prevent infections associated with health care. This knowledge is extremely necessary for a doctor of any specialty. Infections received in medical institutions cause significant medical, social and economic losses, and can spread to the public outside hospitals. The key to the prevention of HCAI cases is the careful application of prevention and infection control measures in treatment and prevention facilities. HCAI prevention is a critical component of patient safety and quality of care. The modern health care system is in urgent need of specialists who have knowledge of diagnostic, anti-epidemic and preventive measures aimed at creating a safe hospital environment for patients and preventing infection of patients and health care workers in medical institutions.

**The subject of study is** HCAI's epidemic process, preventive and anti-epidemic measures.

**Interdisciplinary links:** "Epidemiology and prevention of infections associated with the provision of medical care" is based on the knowledge and skills acquired by applicants in the following components:

a) microbiology, virology, immunology (etiology and microbiological diagnosis of infectious diseases, basics of chemotherapy and antiseptics, sanitary bacteriology and virology, microbiological control of the effectiveness of antimicrobial measures);

- b) hygiene and ecology (hygienic requirements for placement, equipment, equipment and operation of health care organizations, hygienic requirements for working conditions of medical staff);
- c) epidemiology (epidemiological characteristics of populations of infectious diseases, mechanisms of transmission of infectious diseases, epidemiological surveillance, justification of preventive measures).

**Prerequisites:** microbiology, virology, immunology, hygiene and ecology, epidemiology, public health medicine.

**Postrequisites:** Peculiarities of reprocessing of medical products in health care institutions, Treatment of medical waste as a component of infection control in health care institutions,

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

**1.1. The purpose of studying the component « THE ROLE OF THE NURSE IN THE PREVENTION OF HEALTHCARE ASSOCIATED INFECTIONS»** is the formation of a system of basic knowledge of the laws of the epidemic process of infections, which are associated with the provision of medical care and modern principles of infection control, epidemiological surveillance and prevention of this pathology.

**1.2. The main tasks of studying the component « THE ROLE OF THE NURSE IN THE PREVENTION OF HEALTHCARE ASSOCIATED INFECTIONS** are:

1. mastering modern knowledge about the epidemiology of HCAI, the causes and mechanism of formation of HCAI in health care facilities;
2. knowledge of the peculiarities of the epidemic process in infections associated with the provision of medical care, the manifestations of the epidemic process of HCAI;
3. acquisition of knowledge on infection control and standard measures for prevention of infections related to the provision of medical care;

### **1.3. Competences and learning outcomes**

According to the requirements of the standard, the component provides the applicant with higher education 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 08. Skills in using information and communication technologies

GC 09. Determination and persistence in relation to assigned tasks and assumed responsibilities

GC 12. Skills of interpersonal interaction

GC 13. Ability to act on the basis of ethical considerations

#### **special (professional, subject):**

PC 01. Ability to apply professional and legal standards in everyday professional practice.

PC 05 The ability to effectively apply a combination of nursing skills, medical devices, interventions and actions to provide care based on a holistic approach, taking into account the satisfaction of the patient's needs for comfort, nutrition, personal hygiene and the ability of the individual to meet his daily needs.

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:

1. Conduct nursing subjective and objective examination of various organs and systems of the patient and evaluate the obtained data.

PLO 3. Plan nursing interventions.

PLO 4. Monitor the work of junior medical staff and the state of inventory.

PLO 5. Carry out nursing administration.

PLO 8. To perform medical manipulations in order to ensure a sanitary and anti-epidemic regime.

PLO 9. It is necessary to perform medical manipulations in order to ensure the patient's personal hygiene.

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):  
active listening

ability to express one's opinion clearly

ability to be a member of a team, to work for results

leadership skills

ability to determine the essence of the problem and the reasons for its occurrence

ability to find relevant information and reliable sources

the ability to formulate solutions to this problem

the ability to choose the optimal solution

ability to distinguish facts from myths, stereotypes and personal ideas

the ability to concentrate on achieving a goal

## 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 <u>22 "Health Care"</u>	Daily form of education
		Optional
Total number of hours –90	Specialty:  <u>223 "Nursing"</u> (code and name)	<b>course:</b>
		2nd
		<b>Semester</b>
		3th/ 4th
Hours for full-time study:	<u>the first (bachelor's) level of higher education</u>	<b>Lectures</b>
		2 hours <b>Practical classes</b>

classrooms - 32 self-work of the applicant - 58	<u>EPP «Nursing»</u>	30 hours	
		<b>Laboratory classes</b>	
		0 hours	
		<b>Self-work</b>	
		58 hours	год.
		<b>Individual task:0</b> год.	
Final control is credit			

## 2.1 Content of the component

### 2.2.1 Lectures

№	Topic	Hours	Types of lectures
1	Epidemiological features of infections associated with the provision of medical care. Infection control	2	introductory
	Total hours	2	

### 2.2.3

#### Topics of practical classes

Practical class №	Topics of practical classes	Hours	Methods Learning	Forms control
1	Epidemiological features of infections associated with the provision of medical care. Definition of IPNMD. Relevance of IPNMD. Classification of IPNMD. Epidemiological characteristics of populations of IPNMD pathogens. Hospital strain of the pathogen.	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	<p>The mechanism of the development of the epidemic process of IPNMD. Characterization of sources of infection, mechanisms of transmission of IPNMD pathogens, susceptible organism. Manifestations of the epidemic process of IPNMD. Modern structure of IPNMD. Peculiarities of the spread of IPNMD in health care institutions of various profiles. Normative - the legal and methodical basis for IPNMD. The role of the nurse in the prevention of IPNMD</p>	4	<p>story-explanation, conversation, presentation, discussion, video, case-method</p>	<p>Current control: oral examination (individual and frontal); written examination; self-control; report; speech on a given topic Final control: credit</p>
3	<p>Infections in the site of surgical intervention, infections of the respiratory tract. The role of the nurse in the prevention of this pathology</p>	4	<p>story-explanation, conversation, presentation, discussion, video, case-method</p>	<p>Current control: oral examination (individual and frontal); written examination; self-control; report; speech on a given topic Final control: credit</p>
4	<p>Catheter-associated urinary tract infections. Blood stream infections. Blood infections (viral hepatitis B and C, HIV infection). The role of the nurse in the prevention of this pathology</p>	4	<p>story-explanation, conversation, presentation, discussion</p>	<p>Current control: oral examination (individual and frontal); written examination; self-control; report; speech on a given topic Final control: credit</p>
5	<p>Infection control system in healthcare institutions. Hand hygiene of medical personnel. Personal protective equipment</p>	4	<p>story-explanation, conversation, presentation, discussion</p>	<p>Current control: oral examination (individual and frontal); written examination; self-control; report; speech on a given topic Final control: credit</p>

6	Organization of control over compliance with the sanitary and anti-epidemic regime in medical organizations. Standard, contact, drip, air protection measures when providing medical care to patients.	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	Basics of ensuring a safe environment for patients and staff in medical institutions. Safe algorithms for performing medical procedures (injections). Management of medical waste. Treatment of medical underwear. Reprocessing of medical products	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
	Defense of individual independent work. Final test	2	consultation	Final control: credit
Total hours of the practical classes		30		

#### 2.2.4. Laboratory classes

It does not have

#### 2.2.5. Self-work topics

№	Topics	hours	Methods Learning	Forms control
1	Organization of control over compliance with the sanitary and anti-epidemic regime in medical organizations. Standard, contact, drip, air protection measures when providing medical care to patients.	10	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.	Normative - the legal and methodical basis for IPNMD.	3	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.	Epidemiological surveillance of IPNMD.	5	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	Preventive and anti-epidemic measures in the infection control system.	5	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	Principles of professional cleaning of healthcare facilities.	3	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	Basics of ensuring a safe environment for patients and staff in medical institutions. Safe algorithms for performing medical procedures.	8	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	Safety rules for the performance of professional duties by medical personnel. A complex of emergency measures in the event	8	story-explanation, conversation,	Current control: oral examination (individual and frontal); written

	of emergency situations. Personal protective equipment. Immunization of personnel. Medical examination of personnel.		presentation, discussion	examination; self-control; report; speech on a given topic Final control: credit
8	Hand hygiene of medical personnel. Personal protective equipment	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
9	Performing individual self-work.	10	consultation	Final control: PowerPoint presentation and speech on a given topic
10	Preparation for final control	4	consultation	test
	<b>Total</b>	<b>58</b>		

### 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)**

4-point scale	200- point scale	4- point scale	200- point scale	4- point scale	200- point scale
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	<b>Less than 3</b>	<b>Not enough</b>
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		

**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.

Table 3

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

Rating on a 200-point scale	Assessment on the ECTS scale	Score for four-point (national) scale
180–200	A	excellent
160–179	B	good
150–159	C	good
130–149	D	satisfactory
120–129	E	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 №.415;

### 3.3 Control questions, tasks for self-work

1. Definition of HCAI.
2. Relevance of HCAI.
3. Classifications of infections associated with medical care.
4. Pathogens of HCAI.
5. What is a hospital strain, the mechanisms of formation of a hospital strain of the pathogen.
6. What is microbiological monitoring.
7. What is an antibiotic gram.
8. Sources of HCAI infection.
9. Mechanism, ways and factors of transmission of HCAI pathogens.
10. Endogenous and exogenous infection with HCAI pathogens.
11. The role of medical staff in the transmission of HCAI pathogens.

12. Manifestations of the epidemic process of HCAI. The modern structure of HCAI.
13. Infections in the field of surgery, epidemiological features.
14. Infections of the lower respiratory tract, epidemiological features.
15. Catheter-associated urinary tract infections, epidemiological features.
16. Bloodstream infections, epidemiological features.
17. Blood infections (viral hepatitis B and C, HIV infection), epidemiological features.
18. Infection control system in public health facilities.
19. Definition of infection control, structure, history of formation.
20. The purpose and objectives of infection control.
21. Organization of infection control.
22. Accounting and registration of HCAI.
23. Microbiological support of infection control.
24. Epidemiological diagnosis of HCAI.
25. Preventive and anti-epidemic measures in the system of infection control.
26. Organization of control over the observance of the sanitary and anti-epidemic regime in health care institutions.
27. Hand hygiene of medical staff.
28. Medical waste. Classification of medical waste. Medical waste management. Disposal of medical waste. Modern problems.
29. Principles of professional cleaning of health care facilities.
30. Basics of providing a safe environment for patients and staff in medical institutions. Safe algorithms for performing medical procedures.
31. Separation of flows with different degrees of epidemic safety at the stages of treatment of patients.
32. Protection of the patient from secondary endogenous infection.
33. Safety rules for the performance of professional duties by medical personnel. A set of emergency measures in case of emergencies.
34. Means of individual protection of medical personnel.
35. Immunization of personnel. Medical examination of staff.
36. Disinfection, definition.
37. Types of disinfection.
38. Sterilization, definition.
39. Types of sterilization
40. Methods and means of disinfection and sterilization.
41. Sterilization modes for various medical items, instruments, equipment. Quality control of disinfection and sterilization.
42. Standard precautions.
43. Personal protective equipment

### **3.4 Individual tasks**

Topics of abstracts for individual tasks:

1. Infection control
2. HCAI, classification
3. Epidemiological characteristics of catheter-associated urinary tract infections (CAUTI)
4. Epidemiological characteristics of catheter-associated bloodstream infections (in particular, central line-associated bloodstream infections - CLABSI)
5. Epidemiological characteristics of infections of the surgical field infection (Surgical site infections - SSI);
6. Epidemiological characteristics of Ventilator-associated pneumonia (VAP)
7. The use of bundles as a basis for the prevention of HCAI

8. History of the development of the doctrine of hand hygiene of medical staff
9. The main microorganisms of the skin of the hands and their epidemiological significance
10. Skin care of medical staff
11. Protective gloves in the health care system
12. Health Care waste. Classification of Health Care waste. Health Care I waste management. Disposal of Health Care waste. Modern problems.
13. Means of individual protection of medical staff.
14. Safety rules when performing medical duties by medical staff. A set of emergency measures in case of emergencies.
15. Basics of providing a safe environment for patients and staff in medical institutions

**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 international participation	8 - 10
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. Medical Epidemiology: Population Health and Effective Health Care, 5e Raymond S. Greenber. 2020. – 188 p.
4. European Health for All Database (access mode: [www.euro.who.int/en/home](http://www.euro.who.int/en/home)).
5. Official site of WHO <https://www.who.int/ru>, <https://www.who.int/countries/ukr/ru/>
6. Official site of CDC <https://www.multitran.com/c/M.exe?l1=1&l2=2&s=Centers+for+Disease+Control+>
7. Practical Healthcare Epidemiology: Third Edition 3rd Edition by Ebbing Lautenbach (Editor), Keith F. Woeltje (Editor), Preeti N. Malani (Editor)
8. Prevention and Control of Nosocomial Infections, 4th Edition Edited by Richard P. Wenzel Philadelphia: Lippincott, Williams, and Wilkins, 2003. 642 pp., illustrated.
9. Essentials Of Hospital Infection Control Paperback – 1 January 2019 by Apurba S Sastry (Author), Deepashree R (Author)

## 7. INFORMATION RESOURCES

1. A guide to the implementation of the WHO multimodal hand hygiene improvement strategy <https://www.who.int/publications/i/item/a-guide-to-the-implementation-of-the-who-multimodal-hand-hygiene-improvement-strategy>
2. WHO <https://www.who.int/ru>, <https://www.who.int/countries/ukr/ru/>
3. CDC <https://www.multitran.com/c/M.exe?l1=1&l2=2&s=Centers+for+Disease+Control+>
4. 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](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](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-vyv-dyvc.docx](http://files.knmu.edu.ua:8181/upload/redakt/doc_uchproc/nak-poriad-pogl-vyv-dyvc.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](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](http://files.knmu.edu.ua:8181/upload/redakt/doc_uchproc/polog_neform_osv.pdf) 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=uk](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)

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