

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE  
STATE UNIVERSITY  
“UZHHOROD NATIONAL UNIVERSITY”  
MEDICAL FACULTY 2  
DEPARTMENT OF PUBLIC HEALTH AND HUMANITARIAN  
DISCIPLINES

«APPROVED»  
Dean of the Medical Faculty 2  
Prof. Kaliy V.V.

« 31 » 08 2020

THE WORKING PROGRAM OF THE EDUCATIONAL DISCIPLINE  
**HYGIENE AND ECOLOGY**

Educational degree	<b>Master</b>
Studying direction	<b>22 “Health Care”</b>
Specialty	<b>222 “Medicine”</b>
Educational program	<b>General Medicine</b>
Discipline status	<b>Compulsory</b>
The language of instruction	<b>English</b>

Uzhhorod 2020

**Hygiene and ecology** working program for international students with English language of studying, the studying direction 22 "Health Care", specialty 222 "Medicine", educational program "General Medicine"

Author:

Goncharuk-Khomin M.Yu., Assistant

Demchynska M.I., Candidate of Biological Sciences, Associate Professor

Ship D.Ya., Assistant

Turok A.V., Assistant

Golovchanskij R.V., Assistant

Pishkovtsi A-M.M., Assistant

The work program is approved at the meeting of the Department of Public Health and Humanitarian Disciplines

Protocol № 1 from « 28 » 08 2020

Head of the Department of Public Health and Humanitarian Disciplines

 Associative Professor Pohorilyak R. Yu.

Approved by the Scientific and Methodical Commission of the Medical Faculty 2

Protocol № 35 from « 27 » 08 2020

Head of the Scientific and Methodical Commission  Malets N.B.

@Goncharuk-Khomin M.Y., Demchynska M.I. Ship D.Y., Turok A.V., Golovchanskij R.V., Pishkovtsi A-M.M. 2020 p.

## DESCRIPTION OF THE COURSE

Name of indicators	Distribution of hours according to the curriculum	
	Full-time teaching	External form of teaching
Credits ECTS – 6	Year of training:	
The total number of hours – 180	2,3	-
Number of modules – 2	Semester:	
Weekly hours for full-time study: classroom – 2 individual work of students – 2,5	4,5	-
	Lectures:	
	30	-
	Practical:	
	60	-
Type of final control: exam	Laborator:	
	-	-
Form of final control: oral	Individual work:	
	80	-

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

**The purpose** of teaching the discipline «**Hygiene and Ecology**» is to highlight the hygienic requirements and standards necessary for the work of a doctor in order to create optimal treatment conditions and ensure both individual and public health.

According to the educational program, the study of the discipline contributes to the formation of higher education in the following competencies:

### **General competencies:**

- Ability to abstract thinking, analysis and synthesis.
- Ability to learn and master modern knowledge.
- Ability to apply knowledge in practical situations.
- Knowledge and understanding of the subject area and understanding of professional activity.
- Ability to adapt and act in a new situation.
- Ability to make informed decisions
- Skills in the use of information and communication technologies.
- Ability to act socially responsibly and consciously.
- The desire to preserve the environment.
- Ability to act on the basis of ethical considerations (motives).

### **Professional competencies:**

- Skills of collecting information about the patient
- Ability to determine the principles and nature of treatment of diseases
- Ability to diagnose emergencies
- Ability to carry out medical and evacuation measures
- Ability to conduct sanitary and hygienic and preventive measures
- Ability to plan preventive and anti-epidemic measures for infectious diseases
- Ability to maintain medical records
- Ability to process state, social, economic and medical information

## 2. PREREQUISITES FOR STUDYING THE COURSE

*Interdisciplinary connections.* Prerequisites for studying the discipline «**Hygiene and Ecology**» are mastering the following disciplines of the educational program:

- History of medicine and medical ethics

### 3. EXPECTED LEARNING OUTCOMES

According to the educational program «**Hygiene and Ecology**», the study of the discipline should ensure that higher education students achieve the following program learning outcomes (PLO):

<b>Program learning outcomes</b>	<b>PLO code</b>
Determine the necessary mode of work and rest in the treatment of the disease.	PLO 4
Determine the necessary therapeutic nutrition in the treatment of the disease.	PLO 5
To form dispensary groups of patients among the fixed contingent of the population; groups of healthy people subject to dispensary supervision. Implement a system of anti-epidemic and preventive measures within the primary health care. Implement a system of primary prevention measures within the primary health care. Organize secondary and tertiary prevention measures among the assigned contingent of the population.	PLO 12
Plan measures to prevent the spread of infectious diseases. Carry out detection and early diagnosis of infectious diseases; primary anti-epidemic measures in the center of an infectious disease. Identify risk groups, risk areas, time of risk, risk factors and carry out epidemiological analysis of infectious diseases of the population.	PLO 13
To determine the tactics of examination and secondary prevention of patients subject to dispensary supervision; tactics of examination and primary prevention of healthy persons subject to dispensary supervision; calculate and prescribe the necessary food for children in the first year of life.	PLO 14
Conduct screening for major non-communicable diseases; evaluate morbidity indicators, integrated health indicators; identify risk factors for the occurrence and course of diseases; to form risk groups of the population. Determine the source and / or location of the required information depending on its type; receive the necessary information from a specific source; process and analyze the received information.	PLO 17
Identify negative environmental factors; analyze the state of health of a certain contingent; determine the relationship between the state of the environment and the state of health of a particular contingent; develop preventive measures based on data on the relationship between the state of the environment and the state of health of a particular contingent. Carry out analysis of morbidity of the	PLO 18

population, identifying risk groups, risk areas, time of risk, risk factors. Assess the impact of socio-economic and biological determinants on the health of the individual, family, population.	
Investigate the scope and effectiveness of the doctor, department, health care institution; identify defects in activities and the reasons for their formation. Carry out selection and use unified clinical protocols for the provision of medical care, developed on the basis of evidence-based medicine; develop and use local health care protocols. Carry out quality control of medical care; identify factors that hinder the improvement of the quality and safety of medical care. Estimate the cost of medical services; substantiate the choice of an adequate method of financing (payment) and the choice of rational forms of organization of medical services. Apply methods of economic analysis when choosing methods of diagnosis, prevention, treatment, rehabilitation.	PLO 19
Organize the work of medical staff; to form rational medical routes of patients; organize interaction with colleagues, organizations and institutions; apply tools to promote medical services.	PLO 20
Adhere to a healthy lifestyle, use the techniques of self-regulation and self-control.	PLO 22
Organize the necessary level of individual safety (personal and carers) in case of typical dangerous situations in the individual field of activity.	PLO 25

Expected learning outcomes to be achieved by students after mastering the discipline «**Hygiene and Ecology**»:

<b>ELO code</b>	<b>Expected learning outcomes of the discipline</b>	<b>PLO code</b>
ELO 4	Ability to determine the required mode of work and rest in the treatment of the disease.	PLO 4
ELO 5	The ability to determine the necessary therapeutic nutrition in the treatment of the disease.	PLO 5
ELO 12	Ability to form among the fixed contingent of the population dispensary groups of patients; groups of healthy people subject to dispensary supervision. Ability to implement a system of anti-epidemic and preventive measures within the primary health care. Ability to implement a system of primary prevention measures within the primary health care. Ability to organize secondary and tertiary prevention measures among the	PLO 12

	assigned population.	
ELO 13	Ability to plan measures to prevent the spread of infectious diseases. Ability to detect and early diagnosis of infectious diseases; primary anti-epidemic measures in the center of an infectious disease. Ability to identify risk groups, risk areas, time of risk, risk factors and to carry out epidemiological analysis of infectious diseases of the population.	PLO 13
ELO 14	Ability to determine the tactics of examination and secondary prevention of patients subject to dispensary supervision; tactics of examination and primary prevention of healthy persons subject to dispensary supervision; calculate and prescribe the necessary food for children in the first year of life.	PLO 14
ELO 17	Ability to screen for major non-communicable diseases; evaluate morbidity indicators, integrated health indicators; identify risk factors for the occurrence and course of diseases; to form risk groups of the population. Ability to determine the source and / or location of the required information depending on its type; receive the necessary information from a specific source; process and analyze the received information.	PLO 17
ELO 18	Ability to identify negative environmental factors; analyze the state of health of a certain contingent; determine the relationship between the state of the environment and the state of health of a particular contingent; develop preventive measures based on data on the relationship between the state of the environment and the state of health of a particular contingent. Ability to analyze the incidence of the population, identifying risk groups, risk areas, time of risk, risk factors. Ability to assess the impact of socio-economic and biological determinants on the health of the individual, family, population.	PLO 18
ELO 19	Ability to study the scope and effectiveness of the doctor, department, health care institution; identify defects in activities and the reasons for their formation. Ability to select and use unified clinical protocols for the provision of medical care, developed on the basis of evidence-based medicine; develop and use local health care protocols. Ability to control the quality of medical care; identify factors that hinder the improvement of the quality and safety of medical care. Ability to estimate the cost of medical services; substantiate the choice of an adequate method of financing (payment) and the choice of rational forms of organization of	PLO 19



	medical services. Ability to apply methods of economic analysis when choosing methods of diagnosis, prevention, treatment, rehabilitation.	
ELO 20	Ability to organize the work of medical staff; to form rational medical routes of patients; organize interaction with colleagues, organizations and institutions; apply tools to promote medical services.	PLO 20
ELO 22	The ability to follow a healthy lifestyle, use the techniques of self-regulation and self-control.	PLO 22
ELO 25	Ability to organize the required level of individual safety (own and those cared for) in the event of typical dangerous situations in the individual field of activity.	PLO 25

#### 4. DIAGNOSTICS AND CRITERIA FOR EVALUATION OF LEARNING RESULTS

##### Assessment tools and methods for demonstrating learning outcomes

Means of assessment and methods of demonstrating learning outcomes in the discipline are:

ELO 4	Test control, oral examination.
ELO 5	Test control, oral examination, situational tasks.
ELO 12	Test control, oral examination, situational tasks.
ELO 13	Test control, oral examination.
ELO 14	Test control, oral examination, situational tasks.
ELO 17	Test control, oral examination.
ELO 18	Test control, oral examination, situational task.
ELO 19	Test control, oral examination.
ELO 20	Test control, oral examination, situational task.
ELO 22	Test control, oral examination.
ELO 25	Test control, oral examination, situational task.

##### Forms of control and criteria for evaluating learning outcomes

**Forms of current control:** test, written, oral

**Form of modular control:** test, written

**Form of final semester control:** oral - test, exam.

##### Distribution of points received by applicants for higher education (module 1)

Ongoing assessment and independent work															Modular control work	Sum
T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12	T13	T14	T15	80	200
8,5	8,5	8,5	8,5	8,5	8,5	8,5	8,5	8,5	8,5	8,5	8,5	8,5	8,5	8,5		

T1-T4 – Topics

##### Distribution of points received by applicants for higher education (module 2)

Ongoing assessment and independent work															Modular control work	Sum
T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	T11	T12	T13	T14	T15	80	200
8,5	8,5	8,5	8,5	8,5	8,5	8,5	8,5	8,5	8,5	8,5	8,5	8,5	8,5	8,5		

T1-T4 – Topics

### Assessment of certain types of educational work in the discipline

Type of activity of the applicant for higher education	Module 1		Module 2	
	Number	Maximum number of points (total)	Number	Maximum number of points (total)
Practical classes	14	120	14	120
Modular control	1	80	1	80
<b>Together</b>		<b>200</b>		<b>200</b>

### Criteria for evaluating modular control work

The student is admitted to the final modular control if the conditions of the curriculum are met, if for the current academic activity in the discipline he scored at least 72 points, as well as if the student has not missed a single lesson.

The minimum grade that a student can receive for a modular test is - 48 points.

### DISTRIBUTION OF POINTS ASSIGNED TO STUDENTS

Current educational activity	Module 1	Module 2
Topic 1	8,5	8,5
Topic 2	8,5	8,5
Topic 3	8,5	8,5
Topic 4	8,5	8,5
Topic 5	8,5	8,5
Topic 6	8,5	8,5
Topic 7	8,5	8,5
Topic 8	8,5	8,5
Topic 9	8,5	8,5
Topic 10	8,5	8,5
Topic 11	8,5	8,5
Topic 12	8,5	8,5
Topic 13	8,5	8,5
Topic 14	8,5	8,5
<b>Total sum of points for current educational activities</b>	<b>120</b>	<b>120</b>
<b>Final modular control</b>	<b>80</b>	<b>80</b>
<b>The total amount of points for the discipline</b>	<b>200</b>	<b>200</b>

## Conversion of points

Module I			
Practical lesson	Current success	Modular control work	200-point system
«A» - 7,5-8	108-120	«A» - 72-80	«A» - 180-200
«B» - 7	98-107	«B» - 65-71	«B» - 164-179
«C» - 6	89-97	«C» - 59-64	«C» - 163-148
«D» - 5,5	77-88	«D» - 51-58	«D» - 128-147
«E» - 6	72-76	«E» - 48-5	«E» - 120-127
«Fx» - 3-4	42-71	«Fx» - 28-47	«Fx» - 70-119
«F» - 0	0-41	«F» - 0-27	«F» - 0-69

Module II			
Practical lesson	Current success	Modular control work	200-point system
«A» - 7,5-8	108-120	«A» - 72-80	«A» - 180-200
«B» - 7	98-107	«B» - 65-71	«B» - 164-179
«C» - 6	89-97	«C» - 59-64	«C» - 163-148
«D» - 5,5	77-88	«D» - 51-58	«D» - 128-147
«E» - 6	72-76	«E» - 48-5	«E» - 120-127
«Fx» - 3-4	42-71	«Fx» - 28-47	«Fx» - 70-119
«F» - 0	0-41	«F» - 0-27	«F» - 0-69

### Criteria for evaluating the final semester control

The maximum number of points assigned to students when mastering the module (credit) - **200 points**, including for current educational activities - **120 points** (sum of points for current educational activities and for independent work of the student), according to the results of modular final control - **80 points**.

Students who have completed the curriculum and received at least **72 points (35%)** for current performance and modular control work, as well as in the absence of missed classes are admitted to the test and exam.

The final grade for the test is derived by adding the grade for the current performance and the modular grade.

The final grade for the exam is calculated as the arithmetic mean of the two modules.

If one of the modules is less than **120 points**, the student must pass the exam.

Total points for all the educational activities	Score scale ECTS	Assessment on a national scale	
		For exam	For test
180-200	A	perfectly	Passed
164-178	B	good	
148-163	C	Satisfactorily	
128-147	D		
120-127	E		
70-119	FX	Poor may re-take the exam	Not passed may re-up test
0-69	F	Poor from the compulsory re-learning courses	Not credited with the compulsory re-learning courses

## **6. STRUCTURE OF DISCIPLINE**

### **6.1. The content of the discipline**

#### **Semantic module 1**

- Topic 1. Hygiene as a science, its purpose, objectives, content, hygiene methods and research.
- Topic 2. Hygienic significance of solar radiation.
- Topic 3. Hygienic significance of climate, weather, their impact on the health.
- Topic 4. Natural lighting, methods of measurement
- Topic 5. Artificial lighting, methods of measurement
- Topic 6. Technique of the sanitary inspection of water supply sources
- Topic 7. Methods of hygienic assessment of drinking water
- Topic 8. Methods of hygienic assessment of soil
- Topic 9. Methods of assessing the nutritional status of people
- Topic 10. Methods of medical control of vitamins in organism
- Topic 11. The nutrition peculiarities of people of different age groups and occupations
- Topic 12. Methods of expert assessment of milk, meat and fish
- Topic 13. Theoretical aspects and method of prophylaxis of alimentary diseases
- Topic 14. Methods of investigation of the food poisoning cases
- Topic 15. Final module control 1

#### **Semantic module 2**

- Topic 1. Method of hygienic assessment of dangerous and harmful factors of the industrial environment and organism response to their impact
- Topic 2. Method of hygienic assessment of noise and vibration
- Topic 3. Methods of investigation of occupational diseases and poisonings cases
- Topic 4. Method of hygienic assessment of impact of environment for health of children and adolescents. Groups of health
- Topic 5. Method of chemical and physical examination of children goods (toys and books)
- Topic 6. Method of hygienic control of organization the physical and labour training of children and adolescents
- Topic 7. Methods of hygienic assessment of equipment and maintenance of educational establishments.
- Topic 8. Methods of studying of age, psychological and physiological peculiarities of the organism of children
- Topic 9. Hygienic assessment of location and planning of some structural hospital divisions according to the project materials
- Topic 10. Hygienic assessment of the patients stay and medical personnel labour hygiene at patient care institutions
- Topic 11. Hygienic assessment of radiation protection of personnel and radiation safety.
- Topic 12. Healthy lifestyle and personal hygiene. Sleep hygiene
- Topic 13. Psycho-hygienic basics of the daily activity optimization
- Topic 14. Water and water supply hygiene in tropical climate conditions
- Topic 15. Final module control 2

## 6.2. Structure of discipline

Names of content modules and themes		Number of hours					
		Classroom					
		Whole	Including				
			Lectures	Practical	Laboratory	Individ	Independ
Semester 1							
Semantic module 1							
Topic 1.	Hygiene as a science, its purpose, objectives, content, hygiene methods and research.	4		2			2
Topic 2.	Hygienic significance of solar radiation.	5		2			3
Topic 3.	Hygienic significance of climate, weather, their impact on the health.	4		2			2
Topic 4.	Natural lighting, methods of measurement	5		2			3
Topic 5.	Artificial lighting, methods of measurement	4		2			2
Topic 6.	Technique of the sanitary inspection of water supply sources	5		2			3
Topic 7.	Methods of hygienic assessment of drinking water	4		2			2
Topic 8.	Methods of hygienic assessment of soil	5		2			3
Topic 9.	Methods of assessing the nutritional status of people	4		2			2
Topic 10.	Methods of medical control of vitamins in organism	5		2			3
Topic 11.	The nutrition peculiarities of people of different age groups and occupations	4		2			2
Topic 12.	Methods of expert assessment of milk, meat and fish	5		2			3
Topic 13.	Theoretical aspects and method of prophylaxis of alimentary diseases	4		2			2
Topic 14.	Methods of investigation of the food poisoning cases	5		2			3
Topic 15.	Final module control 1	7		2			5
Lecture № 1.	Hygiene as science. Ecology as science. Environment and human health. Biosphere and its hygienic value. Bioethical aspects of environmental effect on a man.	2	2				
Lecture № 2.	Sun radiation and its hygienic value. Usage of constituents of sun radiation.	2	2				
Lecture № 3.	Hygiene of weather and climate. Acclimatization, heliometeotrophic	2	2				

reactions and their prophylaxis.						
Lecture № 4. Hygiene of the inhabited places. Problems of urbanization. Hygiene of habitation	2	2				
Lecture № 5. Water as the factor of health, its hygienic and epidemiologic value. Organization of drinking water supply.	2	2				
Lecture № 6. Soil and health.	2	2				
Lecture № 7. Nutrition as factor of health. Scientific bases of rational nutrition.	2	2				
Lecture № 8. Main components of food, nutritional diseases	2	2				
Lecture № 9. Food poisonings, prophylaxis, prevention	2	2				
Lecture № 10. Current questions of hygiene of children and adolescents. Issues of bioethics and biosafety in hygiene of children and adolescents.	2	2				
Together for the module	<b>90</b>	<b>20</b>	<b>30</b>			<b>40</b>
<b>Together for the I semester</b>	<b>90</b>	<b>20</b>	<b>30</b>			<b>40</b>
Semester 2						
<b>Semantic module 2</b>						
Topic 1. Method of hygienic assessment of dangerous and harmful factors of the industrial environment and organism response to their impact	6		2			4
Topic 2. Method of hygienic assessment of noise and vibration	6		2			4
Topic 3. Methods of investigation of occupational diseases and poisonings cases	6		2			4
Topic 4. Method of hygienic assessment of impact of environment for health of children and adolescents. Groups of health	6		2			4
Topic 5. Method of chemical and physical examination of children goods (toys and books)	6		2			4
Topic 6. Method of hygienic control of organization the physical and labour training of children and adolescents	6		2			4
Topic 7. Methods of hygienic assessment of equipment and maintenance of educational establishments.	6		2			4
Topic 8. Methods of studying of age, psychological and physiological peculiarities of the organism of children	6		2			4
Topic 9. Hygienic assessment of location and planning of some structural hospital divisions according to the project materials	4		2			2
Topic 10. Hygienic assessment of the patients stay and medical personnel labour hygiene at	6		2			4

patient care institutions						
Topic 11. Hygienic assessment of radiation protection of personnel and radiation safety.	4		2			2
Topic 12. Healthy lifestyle and personal hygiene. Sleep hygiene	4		2			2
Topic 13. Psycho-hygienic basics of the daily activity optimization	4		2			2
Topic 14. Water and water supply hygiene in tropical climate conditions	4		2			2
Topic 15. Final module control 2	6		2			4
Lecture № 1. Hygiene and physiology of labour, occupation hygiene	2	2				
Lecture № 2. Hygiene of medical establishments	2	2				
Lecture № 3. Current questions on radiation hygiene. Bioethical and biosafety aspects while using the ionizing irradiation sources	2	2				
Lecture № 4. Healthy lifestyle and personal hygiene. Physical culture and bases of tempering.	2	2				
Lecture № 5. Hygienic description of climate and weather of hot and tropical latitudes (peculiarities of solar radiation, daily and seasonal microclimatic fluctuations). Properties of influence of tropical climate on living conditions, work capacity and population health.	2	2				
Together for the module	90	10	30			50
<b>Together for the II semester</b>	<b>90</b>	<b>10</b>	<b>30</b>			<b>50</b>
<b>Together for a year</b>	<b>180</b>	<b>30</b>	<b>60</b>			<b>90</b>



### 6.3. Topics of practical (laboratory) classes

№	Theme	Number of hours	
		Intramural	Extramural
1	Hygiene as a science, its purpose, objectives, content, hygiene methods and research.	2	-
2	Hygienic significance of solar radiation.	2	-
3	Hygienic significance of climate, weather, their impact on the health.	2	-
4	Natural lighting, methods of measurement	2	-
5	Artificial lighting, methods of measurement	2	-
6	Technique of the sanitary inspection of water supply sources	2	-
7	Methods of hygienic assessment of drinking water	2	-
8	Methods of hygienic assessment of soil	2	-
9	Methods of assessing the nutritional status of people	2	-
10	Methods of medical control of vitamins in organism	2	-
11	The nutrition peculiarities of people of different age groups and occupations	2	-
12	Methods of expert assessment of milk, meat and fish	2	-
13	Theoretical aspects and method of prophylaxis of alimentary diseases	2	-
14	Methods of investigation of the food poisoning cases	2	-
15	Final module control 1	2	-
16	Method of hygienic assessment of dangerous and harmful factors of the industrial environment and organism response to their impact	2	-
17	Method of hygienic assessment of noise and vibration	2	-
18	Methods of investigation of occupational diseases and poisonings cases	2	-
19	Method of hygienic assessment of impact of environment for health of children and adolescents. Groups of health	2	-
20	Method of chemical and physical examination of children goods (toys and books)	2	-
21	Method of hygienic control of organization the physical and labour training of children and adolescents	2	-
22	Methods of hygienic assessment of equipment and maintenance of educational establishments.	2	-
23	Methods of studying of age, psychological and physiological peculiarities of the organism of children	2	-
24	Hygienic assessment of location and planning of some structural hospital divisions according to the project materials	2	-
25	Hygienic assessment of the patients stay and medical personnel labour hygiene at patient care institutions	2	-
26	Hygienic assessment of radiation protection of personnel and radiation safety.	2	-
27	Healthy lifestyle and personal hygiene. Sleep hygiene	2	-
28	Psycho-hygienic basics of the daily activity optimization	2	-
29	Water and water supply hygiene in tropical climate conditions	2	-
30	Final module control 2	2	-
<b>Together</b>		60	-

### **6.5. Individual tasks**

For each topic of the practical lesson and for the topic of independent work, test tasks and / or individual situational tasks are provided.

## **7. INSTRUMENTS, EQUIPMENT AND SOFTWARE USED BY THE COURSE**

**Hardware:** computers with Internet access, multimedia tools, teaching materials.

**Software:** system software, Google-meet application, Moodle open source learning platform.

## 8. RECOMMENDED SOURCES OF INFORMATION

### Recommended Literature

#### Basic

1. Hygiene and ecology. Ed by V.G. Bardov. Nova Knyga, Vinnytsa, 2009. – 688 p.
2. Hygiene and ecology. Student's text-book, 4 modules, 38 chapters. Vladimir A. Korobchanskiy, Michael P. Vorontsov, Alisa A. Mususlbass. Kontrast Publishing Enterprise, Kharkov, 2006. – 207 p.

#### Additional

1. Загальна гігієна: Посібник для практичних занять / За загальною ред. Даценко І.І. – Львів, 2001. – 472 с.: іл.
2. Загальна гігієна. Словник-довідник // І.І. Даценко, В.Г. Бардов, Г.П. Степаненко. – Львів, 2001. – 244 с.
3. Комунальна гігієна // Є.Г. Гончарук, В.Г. Бардов, С.І. Гаркавий, О.П. Яворовський та ін.; за ред. Є.Г. Гончарука. – К.: Здоров'я, 2003. – 728 с.
4. Гігієна харчування з основами нутриціології (за ред. В.І. Ципріяна). – К., 2008. – 568 с.
5. Гігієна праці (під ред. А.М. Шевченка, О.П. Яворовського). – Вінниця: Нова Книга, 2005. – 520 с.

#### Informational recourses

1. <http://www.novaknyha.com.ua> › item › gigiiena-ta-ekologii
2. <https://books.google.com.ua/books>
3. [http://www.irbis-nbuv.gov.ua/cgi-bin/irbis\\_nbuv/cgiirbis](http://www.irbis-nbuv.gov.ua/cgi-bin/irbis_nbuv/cgiirbis)
4. <http://www.novaknyha.com.ua> › item › zbirnik-testovikh-zavdan-do-derzhavnik...

**Viewing results  
working program of the discipline**

The work program was re-approved on 20\_\_\_\_ / 20\_\_\_\_ academic year    unchanged; with changes  
(Annex \_\_\_\_).  
(emphasis added)

Protocol № \_\_\_\_ from «\_\_\_\_» \_\_\_\_\_ 20 \_\_\_\_

Head of the Department    \_\_\_\_\_  
(signature)

Pohorilyak R.Yu  
(Surname initials)

The work program was re-approved on 20\_\_\_\_ / 20\_\_\_\_ academic year    unchanged; with changes  
(Annex \_\_\_\_).  
(emphasis added)

Protocol № \_\_\_\_ from «\_\_\_\_» \_\_\_\_\_ 20 \_\_\_\_

Head of the Department    \_\_\_\_\_  
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