

**Odessa National Medical University**  
**Факультет медичний № III**  
**Department of the Hygiene and medical ecology**

**SYLLABUS**  
**OF THE «Hygiene»**

<b>Amount</b>	120 hours 4 credits
<b>Semester, year of study</b>	4 semester 2019-2020 y.s. 5 semester 2020-2021 y.s.
<b>Days, time, place</b>	Department of the Hygiene and medical ecology, Pishonivska st,1. 3-4 floor Days and time - according to the schedule
<b>Teachers</b>	Doc. Kobolev EV, Doc. Ganykina SO, assistants Sheikh Ali DH, Mokienko AV, Goroshkov OV, Levitsky AV
<b>Контактний телефон</b>	063-765-0818 – Head Teacher of the Department Sheikh Ali Dani Husseinovich
<b>E-mail</b>	sanepidemiolog@i.ua
<b>Consultations</b>	Thursday – з 3.00pm-4.30pm Saturday – 9.00am-12.00pm

**COMMUNICATIONS:**

Classes are at the department, according to the schedule.

Under quarantine, classes will be held on the M Teams or Zoom platform. The Telegram platform is used to address organizational and current issues.

**COURSE ANNOTATION:**

**The subject** of study of the discipline are: **hygiene** - the field of medical knowledge, the science of preserving and strengthening public and individual health through the implementation of preventive measures;

The purpose of teaching the discipline "Hygiene" is: to study the theoretical foundations of preventive medicine, in particular hygiene as a science, which is the basis of the preventive component of the professional worldview of a specialist in the field of training "Medicine".

**During the mastering of the discipline "Hygiene"** the student must acquire special (professional, subject) competencies:

SC10 Ability to plan and implement sanitary and hygienic and preventive measures.

SC11 Ability to plan and implement preventive and anti-epidemic measures for infectious diseases.

**COURSE DESCRIPTION**

**Forms and methods of teaching**

The course will be presented in the form of lectures (30 hours), practical (40 hours) and seminars (30 hours). Organization of independent work of students (80 hours).

Multimedia presentations and laboratory devices are used during the teaching of the discipline.

## **Course content:**

### **Thematic Section 1. GENERAL ISSUES OF HYGIENE & ECOLOGY**

1. Methods of hygienic research, goals, objectives.  
Factors affecting human heat transfer (temperature, humidity, air velocity).  
Comprehensive assessment of the impact of environmental factors. Assessment methods.
- 2 The effect of natural light on the body of a healthy and sick person.  
Hygienic assessment of artificial lighting in domestic and industrial conditions.
- 3 Dust, prevention of diseases caused by dust.  
Influence of atmospheric air pollution on the human body. Assessment methods.  
Ventilation - as a factor in improving the health of the air.
- 4 Physiological, hygienic and epidemiological significance of water.  
Sources of drinking water supply, methods for assessing their quality.
- 5 The value of organoleptic parameters of water as an indicator of good quality.  
Normalization. Chemical composition of drinking water as an indicator of good quality and safety. Normalization.
- 6 Epidemiological safety of water supply. Normalization
- 7 **Control "Environmental Hygiene".**
- 8 Nutrition and human health. Calculation of individual needs. Energy consumption. Methods for assessing the vitamin supply of the body (vitamins: A, B, C).
- 9 Methods for assessing the adequacy of food on the menu - layouts.
- 10 Standardization of essential nutrients as a factor in disease prevention.  
Correction of actual nutrition.
- 11 Milk and dairy products as sources of complete proteins.
- 12 The role and importance of products of animal origin (meat, fish, poultry, eggs).
- 13 Plant foods as a factor of medical and health nutrition (flour, bread, fruits, vegetables).
- 14 Prevention of food poisoning. Toxicoinfections, toxicosis, botulism.  
Food poisoning by products of plant origin (alimentary-toxic aleika).
- 15 **Control "Food Hygiene".**

### **THEMATIC SECTION 2 "SPECIAL ISSUES OF HYGIENE & ECOLOGY"**

- 16 Hygienic assessment of physical factors of the production environment  
Hygienic assessment of chemical factors of the production environment
- 17 Hygienic assessment of working conditions of medical staff of various structural units of hospitals. Methods of investigation of occupational diseases and poisonings. Preliminary and periodic medical examinations as measures for their prevention.
- 18 Hygienic assessment of the location and planning of individual structural units of hospitals.
- 19 Physical development - as an indicator of health, research methods. Group assessment of children's physical development, values of  $m$ ,  $M$ ,  $\delta$ ,  $t$ . Hygienic assessment
- 20 Research of physical development of children caused by individual features.  
Hygienic assessment by the method of sigma deviations.

- 21 Hygienic assessment of environmental factors in the upbringing and education of children. Hygienic bases of physical education and hardening of children and teenagers.
- 22 Hygienic requirements for the organization of the educational process. Hygienic assessment of preschool and school furniture, textbooks, books and toys.
- 23 Radiation hygiene, radiation protection in medical institutions. Methods and means of radiation control - calculation and instrumental. Hygienic assessment
- 24 **Control. Hygiene of children and adolescents**
- THEMATIC SECTION 3 "MILITARY HYGIENE"**
- 25 Organization and conduct of sanitary supervision over the field deployment of military and civilian formations in emergencies and during war.
- 26 Sanitary and preventive measures in the transportation of troops by rail and road. Air transportation.
- 27 Organization and conduct of sanitary supervision over the completeness and safety of food of military and civilian formations in emergencies and during war.
- 28 Organization and conduct of medical examination of food and reconnaissance of water supply sources in the field in emergencies and in combat. Assessment of water quality by field methods. Sampling in the infection.
- 29 Organization and conduct of sanitary supervision over purification, disinfection, decontamination of water in the field in emergencies and during war.
- 30 Organization and conduct of sanitary supervision over working conditions in the field during emergencies and during war.
- 31 Hygienic characteristics of engineering and fortification structures.
- 32 Organization of medical control over the living conditions of personnel. The main types of housing with stationary deployment of troops, sanitary and anti-epidemic measures.
- 33 Characteristics of the main factors that determine the working conditions of medical workers, prevention of their adverse effects on the body. Characteristics of jobs.
- 34 **Control. Military hygiene and emergency hygiene.**
- 35 **Final Control**

#### **List of recommended reading**

1. Конституція України в ред. від 01.01.2020 р. URL: <https://zakon.rada.gov.ua/laws/show/254%D0%BA/96-%D0%B2%D1%80#Text>
2. Основи законодавства України про охорону здоров'я: Закон України № 2801-XII в ред. від 24.07.2020 URL: <https://zakon.rada.gov.ua/laws/show/2801-12#Text>
3. Про забезпечення санітарного та епідемічного благополуччя населення: Закон України № 4005-XII в ред. від 16.10.2020 URL: <https://zakon.rada.gov.ua/laws/show/4004-12#Text>
4. Основи екології: Підручник для студ. вищих навч. закладів /В.Г. Бардов, В.І.Федоренко, Е.М Білецька та ін. Вінниця: Нова Книга, 2013. 424 с.
5. Радіаційна гігієна: підручник для лікарів-інтернів та лікарів слухачів / [Мурашко В.О., Мечев Д.С., Бардов В.Г. та ін.]. Вінниця: Нова Книга,

2013. 376 с.
6. Гігієна праці: Підручник / Ю.І.Кундієв, О.П.Яворовський, А.М. Шевченко та ін.; за ред. акад. НАН України, НАМН України, проф. Ю.І. Кундієва, чл-кор. НАМН України проф. О.П.Яворовського. К.: ВСВ "Медицина", 2011. 904с.
  7. Профілактика внутрішньолікарняних інфекцій (гігієнічні, епідеміологічні та мікробіологічні аспекти) / за редакцією В.Ф. Москаленка. К.: «Здоров'я», 2013. 160 с.
  8. Общая гигиена. Социально-гигиенический мониторинг: учеб. для вузов / П.И.Мельниченко [и др.]: под ред. П.И.Мельниченко. М.: Практическая медицина, 2015. 512 с.
  9. Військова гігієна (загальні питання): підручник М.І.Хижняк, Л.І.Бідненко, В.М.Якимець [та ін.]; за ред.проф. М.І.Хижняка. К.: УВМА, 2011. 528 с.

## EVALUATION

**Current success.** Evaluation of the success of the study of each topic of the discipline is performed according to the traditional 4-point system.

Students' knowledge is assessed from both theoretical and practical training according to the following criteria:

**Excellent ("5")** – The student correctly answered  $\geq 98\%$  of the tests of the format of the state license exams "KROK". Correctly, clearly, logically and fully answers all standardized questions of the current topic, including the question of the lecture course and independent work. Closely connects theory with practice and correctly performs practical work with writing a conclusion on the results. Freely reads the results of laboratory tests, solves situational problems of increased complexity, is able to summarize the material, has the methods of laboratory tests to the required extent.

- **Good ("4")** – The student correctly answered  $\geq 97\%$  -95% of the tests of the format of the state license exams "KROK". Correctly, and essentially answers the standardized questions of the current topic, lecture course and independent work. Demonstrates performance (knowledge) of practical skills. Correctly uses theoretical knowledge in solving practical problems Can solve easy and medium-difficult situational problems. Has the necessary practical skills and techniques to perform in excess of the required minimum.
- **Satisfactory ("3")** – The student correctly answered  $\geq 90\%$  -94% of the tests of the format of state license exams "KROK". Incomplete, with the help of additional questions, answers standardized questions of current activity, lecture course and independent work. Cannot build a clear, logical answer on their own. During the answer and demonstration of practical skills, the student makes mistakes. The student solves only the easiest problems, has only a mandatory minimum of research methods.
- **Unsatisfactory ("2")** – The student answered less than 90% of the tests of the format of the state license exams "KROK". Does not know the material of the current topic, can not build a logical answer, does not answer additional

questions, does not understand the content of the material. Makes significant, gross mistakes when answering and demonstrating practical skills.

- At the last practical lesson, the teacher is obliged to announce to students the results of their current academic performance, academic debt (if any), as well as when completing the curriculum to fill in the student's record book.
- Only those students who do not have academic debts and their average score for the current academic activity in the discipline is not less than 3.00 are allowed to the final certification.
- **Final control of the discipline.**
- The form of final control is difzalik.
- The grade for the discipline is 50% of the current performance (arithmetic mean of all current grades of the student) and 50% - the grade on the differentiated test.
- To assess the discipline on a 4-point traditional (national) scale from the beginning, the average score for the discipline is calculated as the arithmetic mean of the two components:
- The average current score, as the arithmetic mean of all current scores, is rounded to two decimal places.
- The average score for the discipline is translated into the traditional assessment of the discipline on a 4-point scale and is regarded as the ratio of this arithmetic mean to the percentage of mastering the required amount of knowledge in this subject.
- Thus, if the discipline ends with a difference, the student receives two grades - the first on the traditional 4-point system and the second on a 200-point system.

#### **Independent work of student**

The topics of the IWS are defined by the curriculum of the discipline.

The student must prepare an essay on each topic of IVS.

IVS assessment is conducted in the last practical lesson 4 and 5 semesters.

#### **COURSE POLICY**

##### **Terms of mastering the course:**

- Mandatory attendance;
- Activity during practical classes;
- Preparation for classes, homework and IVS, etc .;
- Delivery of tasks in due time;
- Be tolerant, open and friendly;
- Constructively maintain feedback in all classes;
- Be punctual and obligatory.

##### **Not allowed:**

- Omissions for disrespectful reasons;
- Delay and unauthorized departure from the classroom or lecture hall (for late student is not allowed to classes / lectures because it disrupts the educational process. Also for violation of discipline, the student is removed from the classroom and receives "nb");

- Use of mobile phones, tablets, laptops, smart watches, etc. during practical classes and lectures;

- Late delivery of tasks, etc. (Tasks not passed in the specified terms are not accepted and the estimation "2" is exposed);

- Violation of any rules established by the moral and ethical code of ONMedU.

**Deadline and recompilation policy.** Reassignment of missed practical / seminar classes is carried out according to the schedule of the department, the next teacher. The schedule of shifts of teachers of the department is placed on the information stand for students (4th floor)

The practice of missed lectures takes place every Thursday to the head of the department.

**Adherence to academic integrity by students provides:**

1. Independent performance of educational tasks, tasks of current and final control of learning outcomes (for persons with special educational needs this requirement is applied taking into account their individual needs and opportunities);

2. References to sources of information in the case of the use of ideas, developments, statements, information;

3. Compliance with the law on copyright and related rights;

4. Providing reliable information about the results of their own (scientific, creative) activities, used research methods and sources of information.

Unacceptable in educational activities for participants in the educational process are:

- use of family or business ties to obtain a positive or higher assessment in the implementation of any form of control of learning outcomes or advantages in scientific work;

- use of prohibited auxiliary materials or technical means (cheat sheets, abstracts, headphones, telephones, smartphones, tablets, etc.) during control measures;

- passing the procedures of control of learning outcomes by fictitious persons.

For violation of academic integrity, students may be held subject to the following academic liability:

- reduction of results of assessment of control work, examination, credit, etc. ;

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

- appointment of additional control measures (additional individual tasks, tests, tests, etc.);

- re-passing the relevant educational component of the educational program;

- conducting additional verification of other works by the infringer;

- deprivation of the right to participate in competitions for scholarships, grants, etc. ;

- notification of the entity that finances training (research), the institution that issued the grant for training (research), potential employers, parents of the applicant for higher education about the violation;

- exclusion from the rating of applicants for an academic scholarship or accrual of penalty points in such a rating;

- deprivation of an academic scholarship;

- deprivation of tuition benefits provided by the University;

- expulsions from the University.

**Attendance and lateness policy.** Delays in practical classes, seminars and lectures are not allowed. In case of delay, the student is not allowed to the classroom and receives "ab" in the magazine.

**mobile gadgets.** Use of any mobile devices is prohibited. On behalf of this item, the student is removed from classes or lectures and receives a "ab" in the journal.

**Behavior in the audience.** The student's behavior in classrooms must comply with the rules established by the moral and ethical code of the university.