

EUROPEAN MEDICAL UNIVERSITY

SYLLABUS OF THE EDUCATIONAL DISCIPLINE "HYGIENE AND ECOLOGY"

Cycle of Higher Education:	second cycle of higher education (Master's degree)
Field of Study:	22 «Healthcare»
Specialty:	222 «Medicine»
Educational qualification:	Master of Medicine
Professional qualification:	doctor

Description of the discipline (abstract): The curriculum of the discipline "Hygiene and Ecology" is based on the requirements of the Law of Ukraine "About Education" 05.09.2017 №2145-VIII, the Law of Ukraine "About Higher Education" 01.07.2014 №1556-VII, Resolutions of the Cabinet of Ministers of April 29, 2015 № 266 "About the statement of the list of branches of knowledge and specialties in which higher education students are trained", Resolutions of the Cabinet of Ministers of Ukraine of March 28, 2018 № 334 « About the statement of the Order of implementation of a single state qualification exam for applicants for a master's degree in the field of knowledge "Health care", Resolution of the Cabinet of Ministers of 23.13.2013 №11341 "About the statement of the National framework of qualifications", the National Classifier of Ukraine: "Classifier of professions "DK 003: 2010. Publishing House "Sotsinform". K.: 2010 and compiled in accordance with the educational and professional training program "Master of Medicine" in accordance with the requirements of the credit transfer system of the educational process ECTS, based on a combination of learning technologies by sections and credit assessment - units of measurement of student workload required for mastering the discipline or its section.

Interdisciplinary links: Hygiene and Ecology as a discipline is based on knowledge of the main natural sciences: philosophy, computer science, ethics, medical biology, human anatomy, normal physiology, biomedical physics, microbiology, virology, immunology and epidemiology, general chemistry and biochemistry, hygiene and ecology, pathological physiology, life safety, internal medicine, radiation medicine, bioethics, basics of labor protection and integrates with these disciplines.

1. The purpose and objectives of the discipline.

1.1. The purpose of teaching the discipline "Hygiene and Ecology" is to study the theoretical foundations of preventive medicine as a science, which is the basis of the preventive component of the professional worldview of a specialist in "Medicine", students master the necessary knowledge, skills, actions, goals, skills study of the discipline in accordance with the "Standard of Higher Education" in the specialty "221 Medicine".

1.2. The main **tasks** of the discipline " Hygiene and Ecology" are:

- interpretation of the basic laws of hygienic science and general patterns of connection of health with the factors and conditions of the living environment;
- analysis and assessment of the impact of environmental factors on the general and dental health of the population;
- mastering the methods of hygienic assessment of environmental factors and their impact on public health;
- substantiation of hygienic measures for the prevention of dental diseases in accordance with the current legislation of Ukraine;
- use of positive properties of environmental factors for primary, secondary, tertiary prevention of common diseases and diseases of the dental system;
- making knowledge about the negative factors of the environment, determining their relationship with the state of dental health;
- use of knowledge for the development of preventive measures, including dental orientation;
- ability to plan hygienic measures to prevent the spread of common and dental diseases, to assess their effectiveness;
- substantiation of hygienic measures for observance of a healthy way of life, personal hygiene, occupational hygiene, medical and protective mode of dental institutions, to plan their introduction into health care practice;
- mastery of the basics of ethics, deontology, bioethics, the use of methods of psychohygiene and psychoprophylaxis in communication with patients and staff of medical institutions.

11.3 Competences and learning outcomes, the formation of which is facilitated by the discipline (relationship with the normative content of training of higher education, formulated in terms of learning outcomes in the Standard).

According to the requirements of the Standard, the discipline provides acquisition of **competencies** by students:

integral: ability to solve complex problems and problems in the field of health care in the specialty "Medicine" in professional activities or in the learning process, which involves research and/or innovation and is characterized by uncertainty of conditions and requirements;

2. Topics of the lectures - not

3. Topics of the practical lessons 6 course

№ topics	Name of the topics of 6 course	Number of hours
1	Water hygiene and water supply of settlements. Sanitary protection of water bodies	4
2	Sanitary protection of atmospheric air. Hygiene planning of settlements	4
3	Sanitary soil protection and cleaning of populated areas	4
4	Hygiene of residential and public buildings and structures	4
5	Peculiarities of hygienic requirements for planning, operation and conditions of stay of patients in medical and preventive institutions. A set of hygienic measures for the prevention of nosocomial infections	4
6	Nutrition in preventive medicine. Organization of medical and preventive nutrition at industrial enterprises	4
7	Medical control over the organization of medical (dietary) nutrition in medical and preventive institutions and in the public nutrition system	4
8	Legislative basis of sanitary supervision in the field of occupational hygiene. Hygienic evaluation of the factors of the labor process and production environment	4
9	Comprehensive assessment of the state of health of children and adolescents in organized groups and hygienic assessment of the organization of the educational process in preschool and school	4
10	Application of the system of radiation hygiene regulations in the conditions of practical activity, medical practice and artificially enhanced ionizing sources of natural origin	4
Total of 6 course		40

4. Topics of the independent work

№	Name of the topics	Number of hours
	6 course 11,12 semestr	
1	Hygienic conditions of stay of patients in medical institutions.	7
2	A set of hygienic measures for the prevention of nosocomial infections	7
3	Hygienic evaluation of the factors of the labor process and production environment	7
4	Hygienic assessment of the organization of the educational process in preschool and school	7
5	Radiation control systems.	7
Total 6 course		35

5. Teaching methods

Traditional teaching methods are used in teaching the Content Module: verbal methods; visual; practical. Methods of educational and cognitive activity: explanatory-illustrative method, reproductive method, method of problem statement, partial-search or heuristic method, research method.

Methods of stimulation and motivation of educational and cognitive activity: methods of stimulation and motivation of training, methods of control and self-control as methods of training.

Methods of control of stimulation and motivation of educational and cognitive activity of students, as methods of training (control by the teacher, self-control, mutual control, self-correction, mutual correction, correction and integrated methods).

6. Forms of control

Current control is carried out during the study of a specific topic to determine the level of formation of a particular skill or ability, the quality of learning a certain portion of educational material by observing the educational and cognitive activities of students in the classroom, oral questioning, testing, written control of knowledge and skills through written work (written answers to questions, essays, solving situational problems), discussions, role-playing games on the topic of the lesson and test control using a set of standardized tasks.

Final control of academic performance

Forms of control and assessment systems carried out in accordance with the requirements of the discipline program and the Regulation "About the organization of educational process in higher educational institutions" (Order of the Ministry of Education and Science of Ukraine, June 2, 1993 №161), Temporary Regulations on the organization of the educational process in the credit-module system of training, approved by order of the Ministry of Education and Science of Ukraine, January 23, 2004 №48 and Temporary Instruction on assessment of students' educational activity on implementation of credit-modular system of organization of educational process (letter of the Ministry of Education and Science of Ukraine, 16.06.2005 №08.01-22 / 1258) and Recommended changes to the Temporary instruction on assessment of educational activity (letter of the Ministry of Health of Ukraine, 21.01.2008 №08.01-22/65).

The grade in the discipline is defined as the sum of grades of current educational activities (in points), which are displayed at each lesson on the relevant topic and the number of points for the performance of individual tasks by the student.

Independent work of students, which is provided in the topic along with classroom work, is assessed during the current control of the topic in the relevant lesson.

Points for individual tasks are awarded to the student only if they are successfully completed and defended. The number of points awarded for different types of individual tasks depends on their volume and significance, but is not more than 10 points. They are added to the amount of points earned by students for their current academic activities.

7. The scheme of calculation and distribution of points received by students

The general estimation of educational activity of the student at each employment is complex and affixed by the teacher at the final stage of the lesson to the "Journal of attendance and student performance", the head of the group – to "Information on the performance and attendance of students" in the form of grades on the traditional four-point scale: "5", "4", "3", "2" and in points.

At the last thematic lesson on the discipline after studying the topic of the lesson, the teacher of the study group announces the amount of points that each student of the group scored based on the results of the current control according to the following scheme: the arithmetic mean score is calculated for current performance on a 4-point scale. In this case, the student must receive a grade on each topic. Multiply the obtained arithmetic

mean score for the current performance by coefficient 40. The product of multiplication is the student's score on a 200-point scale.

Points for individual tasks are awarded to the student only if they are successfully completed and defended. The number of points awarded for different types of individual tasks depends on their volume and significance, but is not more than 10 points.

The maximum number of points that a student can score when studying the module – **200** (score on the traditional four-point scale "5" × coefficient 40).

The minimum number of points that a student can score when studying the module – **120** (score on the traditional four-point scale "3" × coefficient 40).

The conversion of the number of points from the discipline into the ECTS scale is as follows:

Number of points	ECTS
192-200	A
191-172	B
148-171	C
128-147	D
120-127	E

Students who did not score the minimum number of points must rework missed classes and unsatisfactory grades in a mandatory manner and constitute the main (basic) issues (orally or in writing) in the discipline during the individual-consultative work of the teacher of the relevant academic (semester) group.

8. Methodical support (educational content)

1. Educational and professional program "Medicine"
2. The program of the discipline
3. Methodical guidelines for lectures (for teachers)
4. Methodical guidelines for practical classes (for teachers)
5. Methodical instructions for practical classes (for students)
6. Multimedia equipment of the lecture course
7. Visual aids, technical teaching aids, etc.
8. Sets of situational tasks
9. Sets of test tasks for practical classes
10. Methodical materials for self-study works of students

9. Recommended literature

Basic

1. Bardov V.G., Sergeta I.V. General human hygiene and ecology (Textbook). - Vinnytsia: Nova Kniga, 2002. 216 p.
2. Datsenko I.I., Gabovich R.D. Preventive medicine. General hygiene with the basics of ecology. - 2nd edition. - K.: Zdorovie, 2004. 788 p.
3. Fundamentals of ecology: a textbook for students of higher educational institutions / V.G. Bardov, V.I. Fedorenko, E.M. Biletskaya et al. / Ed. V.G. Bardova, V.G. Fedorenko. - Vinnytsia: Nova Kniga, 2013. 424 p.
4. Hygiene and Ecology. Edited by Professor V.G. Bardov. Vinnytsya: Nova Knyha, 2018. 688 p.
5. Hygiene and Ecology. Edited by Professor V.G. Bardov. Vinnytsya: Nova Knyha, 2009. 688 p.
6. Murashko V.O., Mechev D.S., Bardov V.G. et al. Radiation Hygiene: a textbook for interns and listeners. Vinnytsia: Nova Knyha, 2013. 376 p.

7. Occupational hygiene: Textbook / Y.I Kundiev, O.P. Yavorovsky, A.M. Shevchenko et al; edited acad. NAS of Ukraine, NAMS of Ukraine, prof. Yu.I. Kundiev, prof. O.P. Yavorovsky. – K; “Medytsyna”, 2011. 904p.
8. Prevention of nosocomial infections (hygienic, epidemiological and microbiological aspects) / edited by V.F. Moskalenko - K .: "Health", 2013. 160 p.

Additional

1. Course of lectures on hygiene and ecology. 3rd ed., revised. and additional. Edited by Professor E.M. Biletska. Dnipro, 2017. 254 p.
2. Hygiene and labor protection of medical workers. Textbook / Ed. V.F. Moskalenko, O.P. Yavorovsky. - K .: «Medytsyna», 2009. 176 p.
3. Hygiene of children and adolescents: Textbook / Ed. Corresponding Member Academy of Pedagogical Sciences of Ukraine, Doctor of Medical Sciences, Prof. V.I. Berzin. - Kyiv: Askania Publishing House, 2008. 345p.
4. Moskalenko V.F., Yavorovskiy O.P., Lastkov D.O., Harkavyi S.I. et al. Hygiene and ecology in terms, schemes, tables and tests: textbook. K.: VSV «Medytsyna», 2012. 208 p.
5. Prevention of nosocomial infections (hygienic, epidemiological and microbiological aspects) / VF Moskalenko, OAShevchenko, SIGarkavy, EADerkachev, etc .; Edited by VF Moskalenko.-K .: Zdorovie, 2013.-160 p.
6. Public hygiene. For order Goncharuk E.G. Textbook. Kyiv, "Zdorovie", 2003. - 728 p.
7. Radiation hygiene: Textbook. Edited by Professor V.Ya. Umanskyi, Professor S.T. Omelchuk. Donetsk: Nord-Pres, 2009. 143 p.

10. Information resources:

1. Official web-site of the President of Ukraine – <http://www.president.gov.ua/>.
2. Verkhovna Rada of Ukraine – <http://www.rada.gov.ua/>.
3. Cabinet of Ministers of Ukraine – <http://www.kmu.gov.ua/>.
4. Ministry of Health of Ukraine – <http://moz.gov.ua/ua/portal/>.
5. Ministry of Education and Science of Ukraine – <http://www.mon.gov.ua/>.
6. World Health Organization – <http://www.who.int/en/>.
7. National Scientific Medical Library of Ukraine – <http://www.library.gov.ua/>
8. Dnipropetrovsk Regional Scientific and Medical Library – <http://medlib.dp.gov.ua/>
9. Library SI «DMA» – <http://www.dsma.dp.ua/biblioteka/>
10. Testing Center of the Ministry of Health of Ukraine – <http://testcentr.org.ua/>
11. English-language web resource for doctors and other health professionals – <http://www.medscape.com>
12. English text database of medical and biological publications – <http://www.pubmed.com>.
13. Page of the Department of General Hygiene (301) on the site www.dsma.dp.ua