MINISTRY OF HEALTH OF UKRAINE
BUKOVINIAN STATE MEDICAL UNIVERSITY

APPROVE
Vice-Rector of a higher education establishment
on scientific and pedagogical work
Volodymyr KHODOROVSKYY

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30 _____ 08 _____ 2024

STUDENT GUIDE
(SYLLABUS)
of studying the discipline

SOCIAL MEDICINE, PUBLIC HEALTH

Field of knowledge	22 Healthcare
Specialty	222 «Medicine»
Educational degree	«Master of Medicine»
Course of study	IV
Form of study	full-time
Department	Department of Social Medicine and Public Health

Approved at the methodical meeting of the department of Social Medicine and Public Health «29» August 2024 (protocol №2).

Head of the Department of Social Medicine and Public Health _____ Ihor NAVCHUK

Approved by the subject methodical commission on disciplines of hygienic profile «30» August 2024 (protocol № 1).

Chairman of the subject methodical Commission _____ Svyatoslav DEINEKA

Chernivtsi – 2024

1. GENERAL INFORMATION ABOUT SCIENTIFIC AND PEDAGOGICAL WORKERS WHO TEACH THE DISCIPLINE

Department	Department of Social Medicine and Public Health
Surname, name, patronymic of scientific and pedagogical workers, position, scientific degree, academic title, e-mail	1. Biduchak A. S.- Candidate of Medical Sciences, Associate Professor, biduchak.anzhela@bsmu.edu.ua 2. Vlasyk L. Y. - Candidate of Medical Sciences, Associate Professor, vlasyk.lyubov@bsmu.edu.ua 3. Chornenka Zh. A.- Candidate of Medical Sciences, Associate Professor, chornenka.zhanetta@bsmu.edu.ua 4. Yasynska E. Th. - Candidate of Medical Sciences, Associate Professor, yasynska.elvira@bsmu.edu.ua 5. Domanchuk T. Il. - Candidate of Medical Sciences, AssociateProfessor, domanchuk.tetyana@bsmu.edu.ua 6. Hopko N. V. - Candidate of Medical Sciences, Associate Professor, gopkonv@gmail.com
Web page of the department on the official website of the university	https://www.bsmu.edu.ua/sotsialnoyi-meditsini-ta-ooz/
Website of the department	http://ozo.bsmu.edu.ua/
E-mail	ozo@bsmu.edu.ua
Street address	Fedkovycha, 16
Contact phone	-

2. GENERAL INFORMATION ABOUT THE COURSE

The status of the discipline is	Normative
Number of credits	3,0
The total number of hours	90
Lectures	20
Practical classes	30
Independent work	40
Type of final control	final module control

3. DESCRIPTION OF THE COURSE (ABSTRACT)

The educational discipline "Social medicine, public health" (module 2 Public health) is basic and refers to the professional training of a student of higher education in the specialty 222 "Medicine" and involves mastering the public health of the population based on the analysis of a complex of medical indicators: demographic , morbidity, disability, physical development.

The subject of study of the academic discipline is modern principles of evidence-based medicine, laws of population health, health care system.

4. POLICY OF THE COURSE

4.1 List of normative documents:

- Regulations on the organization of the educational process (https://www.bsmu.edu.ua/wp-content/uploads/2020/03/polozhennya-pro-organizacziyu-osvitnogo-proczesu-u-vdnzu-bukovinskij-derzhavnij-medichnij-universitet .pdf);
- Instructions for evaluating the educational activity of BSMU students in the context of the implementation of the European credit and transfer system for the organization of the educational process (https://www.bsmu.edu.ua/wp-content/uploads/2020/03/bdmu-instrukcziya-shhodo-oczinyuvannya- %D1%94kts-2014-3.pdf);

- Regulations on the procedure for making up missed and uncredited classes (https://www.bsmu.edu.ua/wp-content/uploads/2019/12/reworks.pdf);
- Regulation on the appeal of the results of the final knowledge control of higher education applicants (https://www.bsmu.edu.ua/wp-content/uploads/2020/07/polozhennya-pro-apelyacziyu-rezultativ-pidsumkovogo-kontrolyu-znan.pdf) ;
- Code of academic integrity (https://www.bsmu.edu.ua/wp-content/uploads/2019/12/kodeks_academic_faith.pdf);
- Moral and ethical code of students (https://www.bsmu.edu.ua/wp-content/uploads/2019/12/ethics_code.docx);
- Regulation on prevention and detection of academic plagiarism (https://www.bsmu.edu.ua/wp-content/uploads/2019/12/antiplagiat-1.pdf);
- Regulations on the procedure and conditions for choosing elective disciplines by students (https://www.bsmu.edu.ua/wp-content/uploads/2020/04/nakaz_polozhennyz_vybirkovi_dyscypliny_2020.pdf);
- Rules of internal labor regulations of the Higher State Educational Institution of Ukraine "Bukovyn State Medical University" (https://www.bsmu.edu.ua/wp-content/uploads/2020/03/17.1-bdmu-kolektivnij-dogovir-dodadok.doc).

4.2. Policy on compliance with the principles of academic integrity of students of higher education:

- independent performance of educational tasks of current and final controls without using external sources of information;
- write-offs during knowledge control are prohibited;
- independent performance of individual tasks and correct design of links to sources of information in case of borrowing ideas, statements, information.

4.3. Policy regarding compliance with the principles and norms of ethics and deontology by students of higher education:

- actions in professional and educational situations from the standpoint of academic integrity and professional ethics and deontology;
- compliance with the rules of the university's internal regulations, to be tolerant, friendly and balanced in communication with students and teachers, medical staff of health care institutions;
- awareness of the importance of examples of human behavior in accordance with the norms of academic integrity and medical ethics.

4.4. Policy regarding attendance of classes by students of higher education:

- attendance at all educational classes (lectures, practical (seminar) classes, final module control) is mandatory for the purpose of current and final assessment of knowledge (except for valid reasons).

4.5. The policy of the deadline and making up of missed or uncredited classes by students of higher education:

- making up for missed classes takes place according to the schedule for making up for missed or uncredited classes and consultations.

5. PRECISIONS AND POST-REQUIREMENTS OF THE EDUCATIONAL DISCIPLINE (INTERDISCIPLINARY RELATIONS)

List of disciplines, on which the study is based academic discipline	List of academic disciplines, for which the basis is laid as a result of studying the discipline
Based on the study by students of disciplines: history of medicine, sociology and medical sociology, hygiene and ecology, computer science, ethics, basics of economic theories	Lays the foundations for the study of the organization of the medical-diagnostic process, as well as the assessment of its scope and quality in the study of clinical disciplines Health care organization Evidence-based medicine Therapy

6. PURPOSE AND TASKS OF THE COURSE:

6.1. The purpose of studying an academic discipline is

The purpose of studying the academic discipline "Social medicine, public health" is to acquaint students with the history of social medicine as a science, to analyze the regularities of the formation of population health and the activities of the health care system in order to develop methods for ensuring the high potential of public health as a decisive a factor in the development of society.

6.2. The main tasks of studying the discipline are:

The main tasks of the academic discipline "Social medicine, public health" are:

- assimilation of patterns and features of the formation of population health;
- mastering the principles of developing measures to preserve and strengthen the health of the population and its individual contingents;
- mastering the theoretical foundations and legal foundations of the health care system, its functions and strategic directions of development;
- mastering the principles, directions, tasks of the public health system;
- mastering the basics of the organization of medical care, the principles of evaluating the organization and the quality of providing various types of medical care to the population in the conditions of reforming the health care industry;
- formation of knowledge on the issue of disability examination, its types, order of organization and actions of medical workers regarding specific situations of disability examination.

7. COMPETENCES, THE FORMATION OF WHICH IS CONTRIBUTED BY THE COURSE:

7.1. Integral competence:

The ability to solve complex problems, including those of a research and innovation nature in the field of medicine. Ability to continue learning with a high degree of autonomy.

7.2. General competencies:

- GC 1. Ability to abstract thinking, analysis and synthesis.
- GC 2. The ability to learn and master modern knowledge.
- GC 3. Ability to apply knowledge in practical situations.
- GC 4. Knowledge and understanding of the subject field and understanding of professional activity.
- GC 5. Ability to adapt and act in a new situation.
- GC 6. Ability to make informed decisions.
- GC 7. Ability to work in a team.
- GC 8. Ability to interpersonal interaction.
- GC 10. Ability to use information and communication technologies.
- GC 11. Ability to search, process and analyze information from various sources.

- GC 12. Determination and persistence in relation to assigned tasks and assumed responsibilities.
- GC 13. Awareness of equal opportunities and gender issues.
- GC 14. The ability to realize one's rights and responsibilities as a member of society, to be aware of 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 16. Ability to make decisions and act in accordance with the principle of inadmissibility of corruption and any other manifestations of dishonesty.

7.3. Professional (special) competencies:

- PC 6. Ability to determine the principles and nature of treatment and prevention of diseases.
- PC 11. The ability to solve medical problems in new or unfamiliar environments in the presence of incomplete or limited information, taking into account aspects of social and ethical responsibility, including the system of early intervention.
- PC 13. Ability to carry out sanitary and hygienic and preventive measures.
- PC 15. Ability to carry out a work capacity examination.
- PC 16. Ability to maintain medical documentation, including electronic forms.
- PC 17. Ability to assess the impact of the environment, socio-economic and biological determinants on the state of health of an individual, family, population.
- PC 21. Clearly and unequivocally convey one's own knowledge, conclusions and arguments on health care problems and related issues to specialists and non-specialists, in particular to people who are studying.
- PC 24. Compliance with ethical principles when working with patients and laboratory animals.
- PC 25. Observance of professional and academic integrity, bear responsibility for the reliability of the obtained scientific results.

8. LEARNING OUTCOMES.

As a result of studying the discipline the applicant must:

8.1. Know:

- theoretical foundations, modern principles and legal foundations of health care;
- definition of social medicine and health care organization as a science and teaching subject, its importance for health care practice;
- history of health care development, stages of its formation;
- definition of demography, its constituent parts;
- methods of studying morbidity, its types.

8.2. Be able to:

- to determine and analyze the main indicators of public health in relation to the factors affecting it;
- fill out accounting documents for studying the natural movement of the population;
- fill out registration documents for registration of certain types of illness;
- determine and analyze indicators of morbidity: general, infectious, important non-epidemic, hospitalized;
- fill in the accounting documents of medical and preventive institutions.

8.3. Demonstrate:

- the impact of adverse factors on the state of health of the population (individual, family, population) in the conditions of a medical institution according to standard methods, assess the risk.

9. PROGRAM OUTCOMES OF LEARNING

Integrative final program learning outcomes, the formation of which is facilitated by the educational discipline.

POL 1. Have thorough knowledge of the structure of professional activity. To be able to carry out

professional activities that require updating and integration of knowledge. To be responsible for professional development, the ability for further professional training with a high level of autonomy.

POL 3. Specialized conceptual knowledge, including scientific achievements

in the field of health care and is the basis for conducting research, critical understanding of problems in the field of medicine and related interdisciplinary problems, including the system of early intervention.

POL 18. To determine the state of functioning and limitations of a person's vital activity and the duration of incapacity for work with the preparation of relevant documents, in the conditions of a health care institution, based on data about the disease and its course, peculiarities of a person's professional activity, etc. Maintain medical documentation regarding the patient and the contingent of the population on the basis of regulatory documents.

POL 19. To plan and implement a system of anti-epidemic and preventive measures regarding the occurrence and spread of diseases among the population.

POL 20. Analyze the epidemiological situation and carry out mass and individual, general and local prevention of infectious diseases.

POL 21. Search for the necessary information in the professional literature and databases of other sources, analyze, evaluate and apply this information.

POL 22. Apply modern digital technologies, specialized software, statistical methods of data analysis to solve complex health care problems.

POL 23. Assess the impact of the environment on the state of human health to assess the state of morbidity of the population.

POL 25. It is clear and unambiguous to convey one's own knowledge, conclusions and arguments on health care problems and related issues to specialists and non-specialists.

POL 26. Manage work processes in the field of health care, which are complex, unpredictable and require new strategic approaches, organize work and professional development of personnel taking into account the acquired skills of effective teamwork, leadership positions, adequate quality, accessibility and fairness, ensuring provision of integrated medical care.

POL 28. Make effective decisions on health care issues, evaluate the necessary resources, take into account social, economic and ethical consequences.8.2. Thematic structure of the module (content modules).

10. INFORMATION VOLUME OF THE EDUCATIONAL DISCIPLINE

Description of each discipline module:

The discipline is studied in the 4th year, 90 hours 3 ECTS credits are allocated to the study of the academic discipline.

Structure of the academic discipline	Number of hours, of which				Year of study
	hours/ ECTS credits	classrooms		Student's Independent Work	
		lectures	practical classes		
Module 2. Public health	90 / 3	10	30	40	4-th
Total	**90 / 3**	**10**	**30**	**40**	

*Note: 1 ECTS credit – 30 hours

Module 2. PUBLIC HEALTH.

CONTENT MODULE 1. MEDICAL AND SOCIAL ASPECTS AND BASIC INDICATORS OF PUBLIC HEALTH.

Topic 1. Public health, functions and services.

Public health as a science and a subject. Basic terms and definitions, history of creating a public health system. Basic operational functions of public health. Basic public health services. Modern development of the public health system in Ukraine and the world. Public health infrastructure.

Topic 2. Surveillance and assessment of health and well-being of the population.

Disease surveillance system. Monitoring the incidence and prevalence of diseases. Registers of

infectious and non-infectious diseases. Monitoring of diseases and indicators of maternal and child health, mental health, social health. Registers of ecologically caused diseases, occupational diseases. Injury surveillance. Diagnosing the health of local communities, identifying gaps, health inequalities, needs for action planning.

Topic 3. Population health: main determinants.

Targeted approaches to the definition of "health": general philosophical, individual theoretical, individual practical, population. Population health as a conditional statistical concept. Methods of studying health. Population health indicators: demographic (birth rate, mortality, life expectancy); physical development; morbidity; disability. Leading groups of factors that affect the health of the population: the standard and way of life of people, the state of the environment, biological factors, availability and quality of health care. Features of health of different sexes, professional groups of the population. Public health strategies for maintaining good health.

Topic 4. Medical and social problems of demographic processes.

Demography as a science. Sources. Dynamics of the number and composition of the population in different regions of the world, countries and in Ukraine. Gender and age composition of the population. Natural population movement. Fertility, indicators and factors influencing fertility. Current trends and regional features of birth rate in Ukraine and the world. Total mortality, its leading causes in different regions, individual countries and in Ukraine, gender, age and territorial features. Infant mortality (infant mortality). The value of the indicator for assessing the health of the population, the level of socio-economic well-being and development of society. Leading causes of infant mortality. Average life expectancy, definition. Methods for determining the indicator, its dynamics in different regions of the world, individual countries and in Ukraine.

Topic 5. Methods of studying and assessing the main demographic indicators of natural population movement. Analysis of the demographic situation.

Documents used to study the natural movement of the population. The order of birth registration in Ukraine. The essence of the concepts of "live birth", "stillbirth", "fetal death". Methods for determining and estimating general and special fertility rates. Total mortality. Procedure for registration of deaths in Ukraine. Methods of studying mortality, determination of general and special indicators, their significance and evaluation. The structure of causes of death. Natural population growth. Population changes. Mechanical and natural movement of the population. Depopulation. Analysis of regional features and dynamics of demographic indicators. Assessment of the demographic situation.

Topic 6. Analysis of the population by age, sex, place of residence.

The importance of studying the age structure of the population. Type of age structure of the population (progressive, regressive, stationary) and its changes. "Age Pyramid". Gender disparity: causes and consequences. Urbanization of the population as a socio-economic problem.

Topic 7. Population aging. Analysis of indicators of coolant and demographic load.

Problems related to the aging population. The average life expectancy of the population, including men and women in Ukraine and the world, its dynamics. Demographic load indicator. Labor potential of the country.

Topic 8. Life as a value. Attitude to death and dying as a moral problem.

Formation of attitude to life as a human value. Psychological and spiritual support in the pursuit of life, the definition of death as a natural process in old age or illness. Ensuring a dignified end to earthly life. Moral and ethical aspects of attitude to natural death and euthanasia.

Topic 9. Methods of studying and assessing infant mortality rates.

Procedure for registration of infant (infant) mortality. Methods for determining the indicators of general, neonatal, early neonatal, late neonatal, postneonatal infant mortality. Estimation of the ratio of infant mortality and neonatal mortality. Perinatal mortality. Leading causes of infant mortality at different ages of the first year of life. The main groups of factors influencing the formation of infant mortality rates (biological, environmental, medical and organizational, lifestyle).

Topic 10. Methods of studying and assessing the factors that affect the health of the population.

Classification of risk factors that affect health. Methodical approaches to the study of factors that determine the levels of health of the population and its individual contingents. Features of studying the influence of factors: socio-economic, socio-biological, environmental and climatic, medical and organizational. Application of biostatistics methods (derivatives and averages, standardization method, correlation-regression analysis, parametric and non-parametric assessment of the reliability of research results, score, rating).

Topic 11. Morbidity of the population as a medical and social problem.

The concept of morbidity, the purpose of its study, features in Ukraine and the world. Medico-social significance of morbidity as a leading cause of temporary and permanent disability, mortality. The impact of morbidity on the needs of the population in providing medical care, on the health of future generations. Economic costs associated with the disease, including with the incidence of socially significant and dangerous diseases. Methods of studying morbidity, the possibility of applying certain methods, their advantages and disadvantages. Factors influencing the completeness of morbidity data depending on the methods of its study. International statistical classification of diseases, injuries and causes of death, principles of its construction and significance. Types of morbidity studied in Ukraine. Differences in morbidity rates of urban and rural populations, different age and gender groups. Disability as an indicator of public health, its medical and social significance.

Topic 12. Methods of study and evaluation of general morbidity.

Study of morbidity according to appeals for medical care. Methods for determining indicators of primary morbidity and prevalence of diseases, their assessment. Dynamics of indicators of general and primary morbidity, regional features.

Topic 13. Methods of studying and assessing the incidence of the most important socially significant diseases.

Diseases of the circulatory system, oncological, neuropsychiatric diseases, diabetes, tuberculosis, HIV / AIDS, trauma, alcoholism, drug addiction and substance abuse as medical and social problems. Leading factors influencing the prevalence of diseases. Dynamics of key indicators. Injury as a medical and social problem, types of injuries, case accounting, dynamics of indicators, age and gender in the regions of the world and in Ukraine.

Topic 14. Methods of studying and assessing the incidence of temporary disability.

Leaflet as a source of information for the study of morbidity with temporary disability. Indicators: number of cases and days of disability per 100 employees, average case duration. In- depth study of the morbidity of workers depending on length of service, profession, working conditions.

Content module 2. Medical and social aspects of disability examination. Formation of the population

Topic 15. Organization of medical examination of temporary disability.

Tasks of attending physicians when assessing temporary disability. Medical advisory commission. Content, purpose, procedure for drawing up a medical conclusion of temporary disability. The meaning of a medical conclusion of temporary disability as an electronic document. Categories of a medical conclusion of temporary disability. Drawing up a medical conclusion in e-Health, registers.

Topic 16. Organization of examination of permanent disability.

Expert Team Assessing the Person's daily Living Activities, their types (by administrative-territorial basis, by profiles). functions. Content, purpose and procedure for filling in the main documents of permanent disability, which are used in the examination. Defining and evaluating tactics to determine the cause and groups of disability in its individual types. Medical and social aspects of disability. Methods of calculation and analysis of disability indicators. Disability as an indicator of public health. Dysfunction of the body, leading to disability. Disability groups. Causes of disability. Classes of diseases that cause the main causes of disability. International Classification of Functioning, Disability and Health. Indicators of disability: general disability (contingents of disabled people), primary disability (disability). The structure of the causes of general and primary disability. Injury as a cause of disability of children and adults. Disability among children and adults. Regional features and dynamics of disability indicators.

Topic 17. Comprehensive assessment of public health.

Population health indicators. The main sources of information in the study of public health. Health criteria and groups. Comprehensive assessment of individual health. Assessment of quality of life. Comprehensive assessment of public health. Integral indicators of complex assessment of population health: coefficient of population sustainability; human development index. WHO Summary Measures of Population Health: Disability-adjusted life expectancy - DALE (disability-adjustedlifeexpectancy); health-adjusted life expectancy - HALE (health-adjustedlifeexpectancy). A set of indicators (DALE, HALE) that characterize the global burden of disease: methods of calculation and evaluation. Significance of disease burden research results for the public health system. Improving the health of the least vulnerable. Measures to reduce morbidity and mortality from the most common diseases in Ukraine and Europe.

Topic 18. Analysis of physical development indicators.

Characteristics of physical development as an indicator of public health. Definition of "physical development", its genetic and social conditionality. Biological development and morphofunctional development. Methods of assessing physical development. Regional features and dynamics of physical development indicators.

Topic 19. Providing strategic leadership for health and well-being.

Strategic leadership: definitions, key provisions. Types of strategic leadership for health. Vectors of development. Nationwide approach. The principle of participation of the whole society. A set of policy implementation tools. Political participation and leadership. Strategic planning of public health services, policy planning and monitoring.

Topic 20. Methodology of analysis of the causes of social inequality in relation to health and its protection.

Obstacles to providing the necessary conditions to maintain individual health. Social inequality as a cause of unsatisfactory access to health care and social support. Analysis of the causes of social inequality in health and health care. Ways to improve the health of all segments of the population.

Topic 21. Environmental public health.

Ensuring the protection of public health, including safety of the environment, labor, food, etc. Environmental public health. Components of the living environment of people: natural environment (environment), social environment (society) and man-made environment (domestic and industrial). The main sources of threats to the health of the individual or community. Protecting the human environment. Creating a "comfort zone" for a full life. The importance of intersectoral cooperation and international cooperation for the protection of the human environment.

Topic 22. Public health emergencies. Bioterrorism.

Global threats to international health in the 21st century.

Public health emergencies: effects of climate change, epidemics, mass exposure to chemicals, radiation disasters. International public health security. The role of WHO in the organization of notification and rapid response in emergencies. The concept of international health, current international health issues on the example of the European region. Bioterrorism is a global threat to international health. Biological weapons. Public health system strategy to reduce the risks of biological weapons use and adverse effects.

Topic 23. Stress and conflict. Mechanisms to protect people from stress.

Stress and conflict as a cause of non-communicable diseases. Psychohygiene as a basis for prevention.

Topic 24 Moral, ethical and legal aspects of health interventions.

Development of reproductive medicine. Artificial insemination, surrogacy, gamete donation: moral and ethical aspects. The role of reproductive medicine in solving the problem of low birth rate. Moral and ethical and legal aspects of transplantation.

Topic 25. Prevention and intersectoral cooperation in the public health system.

Prevention in the public health system: population, group, individual. Primary, secondary and tertiary prevention. Health promotion as a preventive activity of the health care system. International health care prevention programs. Targeted prevention programs to combat the most socially significant

diseases: coronary heart disease, hypertension, diabetes, tuberculosis, malignant neoplasms. The role of intersectoral cooperation in improving the efficiency and effectiveness of preventive measures.

Topic 26. Screening programs for early detection of diseases and risk factors.

Screening as a preventive technology. Screening programs for early detection of diseases and risk factors, their use.

Topic 27. Awareness-raising activities (advocacy) as an integral part of medical prevention.

Informing society, decision-makers, politicians about existing and potential health threats, health problems, and the need for preventive measures. The art and technique of informing, influencing and motivating people, institutions, audiences on important issues of health determinants. The tasks and content of the work of centers for disease control and prevention, their structural units, interaction with other health institutions. Development of preventive strategies to protect and promote health, reduce the negative impact of determinants of public health. Prevention programs and strategies for disease prevention.

Topic 28. Health promotion. Types, forms and methods.

Methods and means of medical and hygienic training and education of the population, their features in different health care institutions. Definitions of "health promotion", "healthy lifestyle", "prevention". Types of prevention. The importance of forming a healthy lifestyle to maintain and enhance the health of the population. Leading lifestyle factors that affect the health of the population. Directions for forming a healthy lifestyle. Development of questionnaires to study the factors that affect the health of the population. Drawing up a lecture plan.

Topic 29. Communication and social mobilization for health. Press releases and media relations.

The importance of communication in maintaining and promoting health. Forms of communication. Communication channels. The importance of public relations and the media. Problems and possible errors. A public health press release is an important form of communicating medical information to the general public: rules of compilation and use.

Topic 30. Informatization of public health.

Medical information systems in the world and in Ukraine. Information technology in the global health care system. Medical information systems: storage of information, fast access to information, exchange of information, statistical analysis of consolidated data, reduction of staff working time and reduction of errors. Terminological standards and rubricators. Comprehensive automation of medical institutions. Electronic document management. Electronic patient card.

Topic 31. Visualization and effective presentation of health data.

Dissemination and use of results. Effective presentation of health data. Traditional forms of data presentation in the form of diagrams and tables. Data visualization with the help of modern technologies: infographics, animation, interaction. Forms of presentation: posters, leaflets, booklets, presentations, films.

Topic 32. Defense of course work Topic 33. Final module control.

List of questions for the final module control № 2 "PUBLIC HEALTH"

1. Public health, functions and services.
2. Targeted approaches to the definition of "health". Population health indicators. The burden of disease.
3. Leading groups of factors influencing the health of the population, their classification. Surveillance and assessment of the health and well-being of the population.
4. The subject and content of demography, the importance of demographic data for health care practice. Sources of information, main indicators.
5. Birth rate, indicators in Ukraine. Factors influencing the birth rate.
6. Mortality. Methods of calculating general and special indicators. Features and causes of

mortality in different population groups. Infant mortality. Leading reasons, factors influencing its formation. Medico-social aspects of reducing infant mortality.

7. Average life expectancy (LLL), the relationship with the Human Development Index (HDI). Trends in the dynamics of coolant in different regions of the world, individual countries and in Ukraine. Taking into account the impact of the "burden of disease" on the coolant.
8. Morbidity, its medical and social significance. Study methods, their advantages and possibilities. International statistical classification of diseases, injuries and causes of death, principles of its construction and significance.
9. General morbidity, sources of study. Indicators of general morbidity, features among urban and rural population.
10. Infectious disease: the feasibility of special accounting, the main indicators.
11. Incidence of the most important socially significant diseases: list of nosological forms, main indicators.
12. Hospitalized morbidity: concepts, main indicators.
13. Morbidity with temporary disability, key indicators.
14. The concept of types of pathology of the population. Their characteristics. Leading non-communicable diseases: diseases of the circulatory system, malignant neoplasms, diabetes, chronic obstructive pulmonary disease, their medical and social significance.
15. Leading risk factors for non-communicable diseases: tobacco use, alcohol, low physical activity, malnutrition, metabolic risk factors.
16. Tuberculosis as a medical and social problem.
17. HIV / AIDS as a medical and social problem.
18. Injury, medical and social significance.
19. Physical development. Criteria for studying biological and morpho-functional development. Current trends in physical development.
20. Disability: the main causes of disability, disability groups, the factors that affect it. Definition and assessment of disability indicators.
21. International health. Bioterrorism.
22. Inequality in public health and protection. Detection and reduction.
23. Environmental public health. Ensuring the protection of public health, including safety of the environment, labor, food.
24. Prevention and intersectoral cooperation in the public health system. Types of prevention. Prevention programs in health care. Screening.
25. Health promotion. Advocacy as an integral part of medical prevention.
26. Communication and social mobilization for health.
27. Tasks and content of the work of public health centers, their structural units for prevention and formation of a healthy lifestyle, interaction with other health care institutions.
28. Moral and ethical aspects of health interventions.
29. Informatization of public health. Medical information systems.
30. Provide strategic leadership for health and well-being.

A list of practical tasks and works for the final modular control

Task 1.

It is necessary to assess the dynamics of the birth rate of the population in the Nth district. What data is needed for this? How to get them? What indicators should be calculated? How to register the birth of a child?

Task 2.

It is necessary to assess the dynamics of infant mortality in the Nth district. What data and from which documents will be used for this? By what method are the necessary calculations carried out? How to evaluate the obtained results? Can they be displayed graphically?

Task 3.

It is necessary to assess the dynamics of mortality in the Nth district from the leading causes. What data and from which accounting documents should be used? What indicators should be calculated? How is mortality recorded?

Task 4.

Today, indicators of natural increase are used to estimate population reproduction. From which documents can they be obtained? How to display these indicators graphically? How to estimate the reproduction of the population according to the indicators of natural increase?

Task 5.

A patient with suspected dysentery was sent to the infectious disease department. What documents need to be issued? On the basis of which documents (how, where and when) is the infectious disease of the population analyzed?

Task 6.

The doctor suspected the patient of a malignant tumor. Where and by whom is the patient monitored? Where and how is cancer incidence analysis conducted? What documents will be filled out?

Task 7.

The doctor discovered 6 patients with rheumatism in his ward. How will they be registered by a doctor, where will their further examination be conducted? How to evaluate the effectiveness of monitoring them?

Task 8.

In order to compare the work of two healthcare facilities, a group of doctors was assigned to study the general mortality in the area of operation of these hospitals. What data will be needed for these purposes, their sources? What indicators should be calculated?

Task 9.

A group of students is tasked with studying and comparing infant mortality in two rural areas. What data will be used, their sources and what indicators need to be calculated?

Task 10.

A group of doctors is assigned to study and compare birth rates in two rural areas. What data will be used, their sources and what indicators need to be calculated?

Task 11.

The doctor was instructed to conduct an in-depth analysis of the incidence of temporary disability at an industrial enterprise. What data will be used for this, their sources and what indicators should be calculated?

Task 12.

Students were instructed to study the incidence of temporary disability in general. What data will be used and what indicators need to be calculated?

Task 13.

During a comprehensive medical examination, 20,000 12,600 diseases were detected in the population. What indicators can be calculated in this case? What documents are used for this? How to evaluate the result?

Task 14.

There are 1,800 workers at the industrial enterprise. In 2000, 1,260 illnesses were registered, resulting in the loss of 1,080 working days. Indicate what indicators can be determined from these data, which section of the study of morbidity includes this type of morbidity, and from which documents the necessary data can be obtained? How to evaluate the results?

Task 15.

In the city of N. The population is 200,000. man. There are 68,000 of them aged 60 and over. man. A total of 1,500 people died during the year, including at the age of 60 and older - 900. What indicators can be calculated here? What documents are issued for deceased persons? Is it possible to determine the morbidity of the population based on mortality data?

Task 16.

In the hospital with 100 beds in 2000. 2,000 patients were treated, which occupied 34,000 bed

days. What indicators can be determined here? In the analysis of which section of the report of the healthcare facilities are they used?

Task 17.

In the polyclinic, 60,000 visits to district therapists were registered during the year, including 6,000 from their own districts, 2,400 at home, and 2,300 of them at their own districts. What indicators can be determined with these data? In which section of the report of the healthcare facilities can they be included? What other indicators can be included in this section of the report and how to evaluate them?

Task 18.

In the hospital with 200 beds, patients spent 65,000 bed-days. What indicators can be calculated here and to which section of the report of the healthcare facilities do they belong? Rate them.

Task 19.

In the city of N. 150 thousand population. In 2000 210 cases of malignant tumors were detected for the first time. What indicator can be calculated on the basis of these data and how to evaluate it? In which section of the report of the healthcare facilities is the characteristic of this indicator given? What section of the disease does it belong to? What document is filled out by the district doctor for newly diagnosed patients?

Task 20.

In the city of N. 200 thousand male In 2000, 220 cases of tuberculosis were registered for the first time. What indicator can be determined in the presence of these data and to what values does it refer? In which appendix to the report of the healthcare facilities is the characteristic of this indicator given? To which section of the morbidity record is he belong? What document is filled out by the district doctor for newly diagnosed patients? Name the synonyms of the intensive indicator?

Task 21.

In the city of N. 20 thousand man. Determine the number of full-time medical positions of therapists necessary to provide outpatient polyclinic care. List the main functional duties of a district therapist.

Task 22.

At a comprehensive medical examination in 20 thousand 12,600 diseases were detected. To determine the coefficient of pathological damage of the examined population. What is the difference between this indicator and the indicators of the population's own morbidity and morbidity?

Task 23.

In 2000, patients spent 65,000 bed-days in a hospital with 200 beds. Determine the average duration of operation of the bed for a year. How to evaluate the specified indicator? From which documents can the given data be obtained?

Task 24.

60,000 patients were registered in the polyclinic per year. visits to the district general practitioner. Including 50,000 from their precincts, 24,000 at home, including 22,000 at their precincts. To determine the indicator of regionalism in the care of patients at home and in the polyclinic.

Task 25.

8,726 visits were registered to the district general practitioner during the year. Give an assessment of the doctor's workload taking into account the function of the doctor's position. Where are visits registered? Can this indicator be used to evaluate the doctor's "labor participation" in a team-based form of work?

Performance of Student's Independent Work. Writing the coursework "Methodology of the analysis of the activity of a health care facilieties (HCF)".

11. STRUCTURE OF THE COURSE

Names of content modules and topics	Total	Classroom		Independent student work
		Lectures	Practical training	
1	2	3	4	5
Topic 1. Public health, functions and services.	2	2		
Topic 2. Surveillance and assessment of health and well-being of the population.	4		2	2
Topic 3. Population health: main determinants.	2	2		
Topic 4. Medical and social problems of demographic processes.	2	2		
Topic 5. Methods of studying and assessing the main demographic indicators of natural population movement. Analysis of the demographic situation.	4		2	2
Topic 6. Analysis of the population by age, sex, place of residence.	1			1
Topic 7. Population aging. Analysis of indicators of coolant and demographic load.	1			1
Topic 8. Life as a value. Attitude to death and dying as a moral problem.	1			1
Topic 9. Methods of studying and assessing infant mortality rates.	4		2	2
Topic 10. Methods of studying and assessing the factors that affect the health of the population.	4		2	2
Topic 11. Morbidity of the population as a medical and social problem.	2	2		
Topic 12. Methods of study and evaluation of general morbidity.	4		2	2
Topic 13. Methods of studying and assessing the incidence of the most important socially significant diseases	4		2	2
Topic 14. Methods of studying and assessing the incidence of temporary disability.	1			1
Together on the content module 1	**36**	**8**	**12**	**16**
Topic 15. Organization of medical examination of temporary disability.	4		2	2
Topic 16. Organization of medical examination of permanent disability.	4		2	2
Topic 17. Comprehensive assessment of public health.	4		2	2
Topic 18. Analysis of indicators of physical development.	1			1
Topic 19. Providing strategic leadership for health and well-being.	1			1
Topic 20. Methodology of analysis of the causes of social inequality in relation to health and its protection.	4		2	2
Topic 21. Environmental public health. Ensuring the protection of public health, including safety of the environment, labor, food, etc.	1			1
Topic 22. Public health emergencies. Bioterrorism.	1			1
Topic 23. Stress and conflict. Mechanisms to protect people from stress.	1			1

Topic 24. Moral, ethical and legal aspects of health interventions.	1			1
Topic 25. Prevention and intersectoral cooperation in the public health system.	2	2		
Topic 26. Screening programs for early detection of diseases and risk factors.	1			1
Topic 27. Information and explanatory activities (advocacy) as an integral part of medical prevention.	4		2	2
Topic 28. Health promotion. Types, forms and methods.	4		2	2
Topic 29. Communication and social mobilization for health. Press releases and media relations.	4		2	2
Topic 30. Informatization of public health. Medical information systems in the world and in Ukraine.	1			1
Topic 31. Visualization and effective presentation of health data. Dissemination and use of results.	1			1
Topic 32. Defense of course work	5		2	3
Together on the content module 2	**44**	**2**	**16**	**26**
Individual work	**6**			**6**
Final modular control	**4**		**2**	**2**
Total	**90**	**10**	**30**	**50**

12. THEMATIC PLAN OF LECTURES

№	Name topics	Number of hours
1	Public health, features and services.	2
2	Population health: key determinants	2
3	Medical and social problems of demographic processes.	2
4	Morbidity of the population as a medical and social problem.	2
5	Prevention and intersectoral cooperation in the public health system.	2
	Total	**10**

13. THEMATIC PLAN OF PRACTICAL CLASSES

№	Name topics	Number of hours
1	Surveillance and assessment of the health and well-being of the population.	2
2	Methods of studying and assessing the main demographic indicators of natural population movement. Analysis of the demographic situation.	2
3	Methods of studying and assessing infant mortality rates.	2
4	Methods of studying and assessing the factors that affect the health of the population.	2
5	Methods of study and evaluation of general morbidity.	2
6	Methods of studying and assessing the incidence of the most important socially significant diseases.	2
7	Organization of medical examination of temporary disability.	2
8	Organization of medical examination of permanent disability.	2
9	Comprehensive assessment of public health.	2
10	Methodology for analyzing the causes of social inequality in health and health care.	2
11	Advocacy as an integral part of medical prevention.	2
12	Health promotion. Types, forms and methods.	2
13	Communication and social mobilization for health. Press releases and media relations.	2
14	Defense of course work	2
15	Final modular control	2
	Total hours	**30**

14. THEMATIC PLAN OF INDEPENDENT WORK

№	Name topics	Number of hours
1	Analysis of the population by age, sex, place of residence.	1
2	Population aging. Analysis of indicators of coolant and demographic load.	1
3	Life as a value. Attitude to death and dying as a moral problem.	1
4	Methods of studying and assessing the incidence of temporary disability.	1
5	Analysis of physical development indicators.	1
6	Providing strategic leadership for health and well-being.	1
7	Environmental public health. Ensuring the protection of public health, including safety of the environment, labor, food, etc.	1
8	Public health emergencies. Bioterrorism.	1
9	Stress and conflict. Mechanisms to protect people from stress.	1
10	Moral, ethical and legal aspects of health interventions.	1
11	Screening programs for early detection of diseases and risk factors.	1
12	Public health informatization. Medical information systems in the world and in Ukraine.	1
13	Visualization and effective presentation of health data. Dissemination and use of results.	1
14	Preparation for practical classes - theoretical training and development of practical skills.	26
15	Execution of SIW on the selected topic.	6
16	Preparation for the defense of course work.	2
17	Preparation for the final module control.	3
	Total hours per module	**50**

LIST OF INDIVIDUAL TASKS

Performance of the Student's Independent Work

Methodology of the Analysis of the Activity of the Healthcare Facilities

Each student receives an example of a completed report f.20 treatment and prevention facilities of Chernivtsi region for statistical analysis, mastering the basic accounting and statistical medical documentation of the clinic and hospital and a comparative description of the data. Each student on the basis of the offered data carries out calculation of indicators which are given below.

The main sections of the "Report of the treatment and prevention institution" (form №20):

The list of the basic structural divisions of medical and preventive establishments.

Section I. Staff of the institution at the end of the reporting year.

Section II. Activity of polyclinic (outpatient clinic), dispensary, consultations. Section III. Hospital activities.

Section IV. The work of diagnostic departments.

- X-ray department, ultrasound, endoscopic department (office), laboratory, office of functional diagnostics.

Section V. The work of medical and auxiliary departments (offices).

- offices and departments: radiation therapy, physiotherapy, exercise therapy, reflexology, pathology bureau.

The absolute values presented in this report are used to calculate and further analyze most of the performance of individual structural units of the hospital, assess its staffing, resource efficiency.

The obtained data allow to plan further activities of outpatient clinics, to identify shortcomings in the organization of medical care to the population, to identify promising areas of work of the institution as a whole and its individual services.

Methods of work evaluation medical and preventive institution according to annual reports

The analysis of the work of any HCF should begin with the general characteristics of the territory, economy, sanitary-epidemiological and ecological condition of the area of the institution's

activity. The following is a detailed description of the network of treatment and prevention facilities, lists the number of stations, rural district hospitals, outpatient clinics, medical and obstetric points and more.

An important section of the general characteristics is the demographic characteristics of the population: age and sex composition, distribution by place of residence (urban, rural) and

employment in the sectors of the economy, density per 1 km2. Be sure to describe the birth rate, overall mortality, infant mortality, natural increase, and more.

General characteristics

1. Birth rate.
2. Total mortality.
3. Natural increase
4. Infant mortality.
5. The structure of the main causes of death.

Function of the medical position (number of patients and healthy people to be admitted by a doctor of this specialty according to the plan for the year):

Example:

The function of the medical position of the therapist = (3,5x5) + (3x2)) x 251, where:

3.5 - the number of hours of work of the therapist in the clinic (according to the schedule); 5 - the number of patients to be admitted by a physician for 1 hour in the clinic;

3 - number of hours of work of the therapist on service of patients at home (according to the schedule);

2 - the number of patients that the therapist must serve at home for 1 hour; 251 - the number of working days per year.

Preventive examinations performed by the clinic

(information is taken from the reporting form f. № 20)

B. Staff of medical and preventive institution

(information taken from the report f. № 20)

Provision of the population by states	Number of full-time positions of doctors Average annual population	x 10000
Staffing of the institution with doctors	Number of positions occupied by doctors Number of full-time positions of doctors	x 100

Staffing of middle and junior medical staff is calculated similarly.

Coefficient of combination	Number of occupied medical positions Number of natural persons of doctors in positions held
The ratio of the number of positions occupied by nurses to the positions of physicians	The number of positions occupied by nurses staff Number of medical positions occupied

C. Activities of the clinic (outpatient clinic), work of doctors of polyclinic

(information taken from the report f. № 20 and f. № 039 / o)

Provision of the population with outpatient care	Total number of visits to the doctor per year Average annual population
The average workload of a doctor per year	The number of visits to doctors of this profile in polyclinic for a year The number of positions held by doctors in this profile
The average workload of a doctor for one day of work	The average number of visits to the doctor profile for the year Number of working days in a given year

Average doctor's workload during work	The average number of visits to the doctor profile in one day	
	The average number of hours a doctor works in the clinic for one shift	

(Similarly, the average workload of a doctor at home is calculated).

Structure of visits of doctors in the polyclinic by separate specialties	Number of visits of doctors in the polyclinic for individual specialties	x 100
	The total number of all visits to the clinic	
Proportion of visits to the polyclinic for preventive examinations	Number of visits to the polyclinic for preventive examinations	x 100
	The number of all visits to the clinic	
Share of home visits	Number of home visits	x 100
	Number of all visits	

Coverage of preventive examinations of adolescents	Number of examined adolescents	x 100
	The number of all adolescents subject preventive examination	
Coverage of preventive examinations of workers and other contingents of the population subject to preventive examinations	Number of examined workers	x 100
	The number of all workers subject to preventive examination	

Morbidity of the population and medical examination of patients in the area of activity of the medical institution

(information taken from the report f. № 12 and f. № 030 / o)

Incidence	Number of diseases detected for the first time in the current year	x 1000
	Average annual population	
Morbidity (prevalence)	The number of all diseases registered in the current year	x 1000
	Average annual population	

(Morbidity and morbidity for individual nosological forms is calculated similarly).

Completeness of coverage by dispensary supervision of patients subject to medical examination	Number of all patients subject to dispensary supervision (all patients registered at the dispensary at the end of the year)	x 100
	The number of all registered in the current	
Proportion of patients detected at preventive examinations, among all patients diagnosed for the first time this year	Number of patients detected at professional examinations	x 100
	All patients were diagnosed for the first time this year	

(Indicators of morbidity, morbidity and coverage by dispensary supervision of individual nosological forms are calculated similarly).

Timeliness of coverage by dispensary supervision of patients subject to medical examination	The number of all patients who are taken in the current year under dispensary supervision	x 100

	The number of all patients diagnosed in the current year	

(This indicator is also calculated for individual nosological forms).

Average number of dispensary patients per one occupied position of a doctor in certain specialties	Number of dispensary patients of therapeutic profile	
	Number of employed doctors positions of therapists	
The quality of disease diagnosis in the clinic	The number of outpatient diagnoses that coincided among hospitalized patients	x 100
	The number of all cases of hospitalization	

D. The work of the hospital

Indicator of average annual bed occupancy	Number of bed-days spent by patients	
	Average annual number of beds	
The average length of stay of the patient in the hospital	The number of bed-days spent by patients in the hospital	
	Average annual number of beds	
Bed turnover / function rate	Number of patients treated in hospital	
	Average annual number of beds	

The given statistical indicators (1-3) are calculated in general both for a hospital, and for all its concrete branches.

Mortality rate	Number of patients who died in hospital	x 100
	Number of discharged + Number of patients who died in hospital	

The statistical map of the patient who left the hospital (f. № 066 / o) also allows for a very detailed analysis of mortality rates for hospital wards by classes and individual diseases for certain age or sex groups of patients.

Indicator of the frequency of complications of diseases	Number of complications in individual diseases	x 100
	Number of patients with relevant diseases	
Indicator of the total number of surgical interventions per 100 surgical beds	Total number of surgical interventions	x 100
	Number of all surgical beds	
Indicator of the number of surgical interventions by individual types per 100 surgical beds	Number of surgical interventions by individual types	x 100
	Number of all surgical beds	
Indicator of the structure of surgical interventions	The number of surgical interventions for individual species	x 100
	The total number of surgical interventions	
Indicator of equipment use during operations (laser, cryogenic, endoscopic)	Number of surgical interventions using equipment	x 100
	The total number of surgical interventions	
Postoperative mortality rate	Number of dead operated patients	x 100
	Number of operated patients	

Postoperative mortality is supplemented by appropriate indicators for individual operations, as well as mortality rates of operated patients under general anesthesia, as well as among operated patients delivered to the hospital on time or late.

Indicator of postoperative complications	The number of operated patients who had postoperative complications	100	x
	The number of all operated patients		
Urgent surgical care assessment rate	Number of patients delivered to the hospital later than 24 hours after diagnosis	100	x
	Number of patients delivered for emergency care		
Indicator of the average number of operations per one position of a surgeon	Number of operations performed	100	x
	Number of positions of surgeons		
Indicator of seasonality of the disease	Number of patients admitted to the hospital at a certain time of year (summer, autumn, winter, spring)	100	x
	The number of all patients admitted to the hospital		
Indicator of the structure of hospital admissions by area	Number of patients admitted to the hospital from a certain area (city, rural area)	100	x
	The number of all patients admitted to the hospital		
Indicator of morbidity structure by sex / age	Number of patients of a particular sex / age, who were treated in the hospital	100	x
	The number of all patients treated in the hospital		
Hospital referral rate	The number of patients who were referred to the hospital family doctors (outpatient clinics, ambulance, transferred from another hospital, applied independently))	100	x
	The number of all patients admitted to the hospital		
Indicators of emergency / planned hospitalization	Number of patients admitted to the hospital emergency / planned	100	x
	The number of all patients admitted to the hospital		
Indicators of hospitalization time	Number of patients admitted to the hospital up to 6 hours (7-24 hours, later 24 hours)	100	x
	The number of all patients admitted to the hospital		
Indicator of primary (re)	The number of patients admitted to the hospital for the first / second time	100	x
hospitalization	The number of all patients admitted to the hospital		
Morbidity rate	he number of patients who were discharged from the hospital with recovery (improvement, unchanged, died, transferred to other departments, healthy)	100	x
	The number of all patients admitted to the hospital		
Indicator of the Wasserman reaction in patients admitted to the hospital	Number of hospital patients who underwent RW-study	100	x
	The number of all patients admitted to the hospital		
Indicator of the proportion of patients who were tested for HIV	The number of hospital patients who were tested for HIV	100	x
	The number of all patients admitted to the hospital		
ndicator of admission of patients to the hospital depending on individual contingents of the population	Number of war invalids (war participants, victims of the Chernobyl accident, etc.) who were admitted to the hospital	100	x
	The number of all patients admitted to the hospital		
Coincidence indicator of clinical and pathological diagnoses	Number of diagnoses that coincided	100	x
	The number of autopsies in the hospital		
Coincidence of referral diagnoses and clinical / final diagnoses	Number of diagnoses that coincided	100	x
	The total number of patients treated in the hospital		
Execution by patients of the	Number of bed-days spent by patients		x

plan of bed-days in a hospital / department of hospital	Planned number of bed-days	100

E. The work of auxiliary service rooms patients in the polyclinic and in the hospital

Polyclinic	Number of all procedures, tests, etc	x
	The number of all visits to the polyclinic and at home	100
Hospital	Number of all procedures, tests, etc.	x
	The number of all patients treated in the hospital	100

Each auxiliary department (office) characterizes the work in comparison with last year, calculates structure of the carried-out procedures, analyzes, separately analyzes work on service of patients at home.

Pathology Department	Number of deaths in which autopsies were performed	x 100
	The number of all deaths in the hospital	
Proportion of working time of doctors devoted to health education	Number of hours devoted to health education	x
	The total amount of hours accounted for by all positions held by physicians	100
Average number of lectures given by one doctor	Number of lectures given by all doctors	
	The number of all positions held by doctors	

MODEL OF FINAL RESULTS

To develop the model of the final result, two groups of indicators are used: performance indicators (morbidity, disability, mortality, etc.) and defect indicators (complaints, refusal of hospitalization, etc.). Performance indicators should be expressed only in relative values, defect indicators can be recorded in both relative and absolute. Then each performance indicator is given the standard and the assessment of the standard in points, the unit of measurement of deviation from the standard is selected, which is also evaluated in points.

For example (Table 1). The standard of the first indicator is 8% (column 3), estimated at 5 points; (column 4); deviation from the standard by 1% - in 2 points (column 6). The sign (column 5) "-" (minus) means that the indicator above the standard reduces the score. The sign "+" (plus) means that the indicator higher than the standard increases the score (indicator 2).

For example: substantiated complaints. The standard is zero (column 3). There is no assessment of the standard (column 4). The presence of a complaint is estimated at 0.3 points (column 6). The sign "-" (column 5) means that the appearance of a defect always reduces the score.

On the basis of the efficiency indicators and defect indicators evaluated in this way, the "scale of assessment of conditional indicators" is built in the form of a table.

Table 1 Scale for assessing conditional indicators

	Name of indicator	**Unit of measurement**	**Standard**	**Evaluation in points**		
				standard	**deviation**	
					sign	**per unit of measurement**
	2	**3**	**4**	**5**	**6**	**7**
Performance indicators						
.	Mortality	per 1,000 population	8,0	5	-	2
.	Rehabilitation	percentage of the number of disabled	12	3	+	1

Indicators of defects						
.	Substantiated complaints	-	0	-	-	0,3

Methods of integrated evaluation of the department, subdivision according to the model of final results

For example: in the area of activity of the HCF the mortality rate is 8.7% 0, the rehabilitation rate for the disabled is 12.4% 0, and 3 substantiated complaints were registered during the year.

Estimation of mortality rates 5 - (8.7-8) 2 = 3.6, where:

5 - assessment of the mortality rate in points; 8 - mortality rate in ppm; 8.7 - mortality rate at the polling station; 2 - assessment of the unit of deviation from the standard in points; "-" - a minus sign.

Assessment of disability rehabilitation 3+ (12.4-12) 1 = 3.4

Estimation of defects (substantiated complaints)

-0.3 ×3 = -0.9

TOPICS OF INDIVIDUAL EDUCATIONAL AND RESEARCH TASKS

(search, research and analytical works)

Writing a term paper on the example of a completed report f.20 according to the list:

1. Khotyn district.
2. Storozhinetsky district.
3. Sokyrian district.
4. Putylsky district.
5. Regional clinical hospital
6. Novoselytskyi district
7. City Hospital No. 3
8. City Hospital No. 1
9. Emergency medical care hospital
10. Kitzman district
11. Kelmenetsky district
12. Zastavnivskyi district
13. Hlybocki district
14. Hertsaiv district
15. Vyzhnytskyi district

15. METHODS AND FORMS OF CONTROL

Current control is carried out at each practical lesson in accordance with the specific goals of the topic, as well as during individual work of the teacher with the student for those topics that the student works on independently and which are not included in the structure of the practical lesson. It is recommended to apply types of objective (standardized) control of theoretical and practical training of students.

The final module control is carried out at the end of the module study at the last practical session. Students who have completed all types of work prescribed by the curriculum and have scored at least the minimum number of points during the study of the discipline are admitted to the final examination.

FORM OF FINAL CONTROL OF LEARNING SUCCESS

The form of final control should be standardized and include control of theoretical and practical training. Specific forms of discipline control are defined in the work curriculum.

The maximum number of points of the final control is 80 points.

The final modular control is considered passed if the student has scored at least 50 points.

16. ASSESSMENT OF THE STUDENT'S LEVEL OF TRAINING IN THE DISCIPLINE

Control measures include current and final control.

The modular rating system for evaluating knowledge in the discipline "Social medicine, public health" (module 2 "Public Health ") provides for the following forms of work and their evaluation:

When assessing the mastery of each topic of the module, the student is given grades on a four-point (traditional) scale, using the evaluation criteria accepted by BSMU and approved by the methodical commission. At the same time, all types of work provided for by methodical development for studying the topic are taken into account. The marks given on the traditional scale are converted into points depending on the number of topics in the module. The weightage of each topic in a module should be the same, but may vary between modules

The maximum number of points that a student can score while studying the module is calculated by multiplying the number of points (8) corresponding to the grade "5" by the number of topics (14) and is **120 points** (8 × 14 + 8 points for individual work = 120 points).

The minimum number of points that a student can score while studying the module is a **criterion for admission to the module final control** - it is calculated by multiplying the number of points (5) corresponding to the grade "3" by the number of topics in the module (14) and is **70 points**. Distribution of points by modules:

Traditional assessment	**Conversion into points**
	Module 1
«5»	8
«4»	6,5
«3»	5
«2»	0

Grades given on a traditional scale are converted into points, as an example, as follows:

Module number, number of study hours / number of ECTS credits	**Number of content modules, their numbers**	**Number of practical classes**	**Conversion into scores of traditional grades**					
			Traditional estimates				**Points for individual tasks**	**Minimum number of points ***
			"5"	**"4"**	**"3"**	**"2"**		
Module 2 90/3,0	2 (№ 1-2)	14	8	6,5	5	0	8	70

The minimum number of points that a student can obtain is calculated by multiplying the number of points corresponding to the grade "3" by the number of topics in the module. A student is admitted to the final inspection if he fulfills the conditions of the educational program and if he has scored at least:

The minimum number of points for the current educational activity, which is an admission to the final module control	Number of points
	Module 1
The minimum number of points corresponding to the grade "3" multiplied by the number of classes	5 x 14 = 70
Individual task	4
The minimum number of points for the final module lesson	50
The minimum number of points a student can score	**124**

The maximum number of points that a student can score is calculated by multiplying the number of points corresponding to the grade "5" by the number of topics in the module with the addition of points for individual independent work that the student can perform if desired.

The maximum number of points for the current educational activity that a student can score	**Number of points**
	Module 1
The maximum number of points corresponding to the grade "5" multiplied by the number of classes	8 x 14= **112**
Individual task	**8**
The maximum number of points for the final module lesson is	**80**
The maximum number of points a student can score is	**200**

The final module control is carried out after completing the study of all topics of the module at the last control session of the module.

The grade for the discipline is given only to students who have fulfilled all the conditions of the study program. The number of points a student earns from a discipline is defined as the sum of points for the current educational activity, points of the final control with the addition of points for individual independent work.

According to the decision of the Academic Council, incentive points can be added to the number of points in the discipline for students who have scientific publications or won prizes for participation in the Olympiad in the discipline among higher education institutions of Ukraine, etc.

The objectivity of the assessment of students' educational activity should be checked by statistical methods (the correlation coefficient between the current academic performance and the results of the final module control).

Conversion of the number of points from the discipline into grades according to the ECTS and 4-point (traditional) scales:

The number of points in the discipline awarded to students is converted into a 4-point (traditional) scale as follows:

Score on a 200-point scale	**Score on a four-point scale**
From 180 to 200 points	"5"
From 150 to 179 points	"4"
From 149 to the minimum number of points that must be scored by student	"3"
Below the minimum number of points that must score a student	"2"

17. REFERENCE

17.1 Basic

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5. Methods of analysis of the activities of medical institutions of primary health care. Training manual / Gritsyuk MI, Navchuk IV, Yasinskaya ET, Chornenka Zh.A., Biduchak AS, Litvinyuk N.Ya. - Chernivtsi: VDNZ of Ukraine "Bukovynian State Medical University", 2019. – 116 p.

6. Methods of analysis of the activities of medical institutions at the secondary and tertiary levels. Training manual / Gritsyuk MI, Navchuk IV, Yasinskaya ET, Chornenka Zh.A., Biduchak AS, Litvinyuk N.Ya. - Chernivtsi: VDNZ of Ukraine "Bukovynian State Medical University", 2019 p.

17.2. Helpful

1. Primary health care measurement framework and indicators: monitoring health systems through a primary health care lens. Geneva: World Health Organization and the United Nations Children's Fund (UNICEF), 2022. Licence: CC BY-NC-SA 3.0 IGO.

2. Board Review in Preventive Medicine and Public Health. Gregory Schwaid. - ELSEVIER., 2017. - 450 p.

3. Donaldson`s Essential Public Health, Fourth Edition. Liam J. Donaldson, Paul Rutter - CRC Press, Taylor & Francis Group, 2017 - 374 p.

4. Jekel`s epidemiology, biostatistics, preventive medicine and public health. Fourthedition. DavidL. Katz, Joann G. Elmore, Dorothea M.G. Wild, Sean C. Lucan. - ELSEVIER., 2014. - 405 p.

5. The population of Ukraine. Demographic Yearbook. - Kyiv: State Statistics Committee of Ukraine. (access mode: www.ukrstat.gov.ua).

6. Annual report on the state of health of the population, sanitary and epidemiological situation and the results of the health care system of Ukraine. 2016 / Ministry of Health of Ukraine, State Institution "UISD of the Ministry of Health of Ukraine". - Kyiv, 2017. - 516 p.

7. Institute of Medicine. 2003. *The Future of the Public's Health in the 21st Century*. Washington, DC: The National Academies Press https://doi.org/10.17226/10548.

17.3 Information resources

1. - World Health Organization www.who.int
2. - European Health for All Database www.euro.who.int/en/home
3. - Cochrane Center for Evidence-Based Medicine www.cebm.net
4. - Cochrane Library www.cochrane.org
5. - US National Library of Medicine - MEDLINEwww.ncbi.nlm.nih.gov/PubMed
6. - Canadian Center for Evidence in Health Care.cche.net
7. - Centers for Disease Control and Prevention www.cdc.gov
8. - Public Health Center of the Ministry of Health of Ukraine www.phc.org.ua.
9. -Ukrainian database of medical and statistical information "Health for All": http://medstat.gov.ua/ukr/news.html?id=203
10. - British Medical Journal www.bmj.com
11. - Journal of Evidence-Based Medicine www.evidence-basedmedicine.com .
12. - https://eosvita.bsmu.edu.ua/

18. COMPILERS OF THE GUIDE FOR STUDENTS (SILABUS)

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