MINISTRY OF HEALTH OF UKRAINE

KHARKIV NATIONAL MEDICAL UNIVERSITY

Department of Public Health and Health Management

**SILLABUS**

«Social Medicine, Public Health and Scientific Methods of Investigations in Medicine»

(name of the discipline)

academic year 2020/2021

training direction **22 «Health care»**

(code and name of the direction of training)

specialty **222 «**Medicine**»**

(code and name of the specialty)

**3** course **«Master»**

(full-time studying)

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| The work program was approved at the meeting of the department  public health and health management  Protocol from.  “28” аugust 2020 № 13  Head of Department  \_\_\_\_\_\_\_\_\_\_\_\_\_\_ V.A. Ognev (signature) (surname and initials)  “28” аugust 2020 |  | Approved by the methodical commission of KhNMU on public health problems  Protocol from.  “31” аugust 2020 № 12  Head of Department  \_\_\_\_\_\_\_\_\_\_\_\_ V.A. Ognev (signature) (surname and initials)  “31” аugust 2020 |

1. **Data on teachers who teach the discipline**

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| **Name, father's name, surname of teacher** | **Ohnev Victor Andreevich** |
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| Lessons schedule | According to the schedule of the educational department |
| Consultations | Tuesday 15.30-17.00 |
| Location | Aud. Department of Public Health and Healthcare management |

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| **Surname, name, patronymic of the teacher** | **Pomogaybo Katerina Georgievna** |
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| Location | Audience of the Department of Public Health and Health Management |

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| Location | Audience of the Department of Public Health and Health Management |

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| **Surname, name, patronymic of the teacher** | **Nesterenko Valentyna Gennadievna** |
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| Location | Audience of the Department of Public Health and Health Management |

**Syllabus developers:**

Doctor of medicine., Prof. Ohnev V.A.,

Doctor of medicine., Prof. Sokol K. M.,

PHD., as.prof. Nesterenko V.G.

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**COURSE ANNOTATION**

The discipline " Social Medicine, Public Health and Scientific Methods of Investigations in Medicine " includes information on the basic concepts and terms of health care, features of regulatory and legal support in health care and modern strategy for reforming the health care system, features of the organization of primary, specialized and highly specialized medical care, inpatient and emergency, as well as palliative and hospice care. As well as the study of the peculiarities of medical care for the elderly, maternity and childhood care, the organization of medical examination of disability, mastering the principles of methods of expert assessments of the quality of medical care, analysis of factors influencing the activities of health care facilities, studying health management , making management decisions and implementing a modern approach to e-health.

The study of this discipline is one of the integral components of training a highly qualified specialist in the field of public health, who has a systematic understanding of the organization and basic principles and features of the health care system and is able to apply this knowledge for professional activities in the field of public health.

The subject of study of the discipline is: modern approaches and features of the organization of health care in Ukraine.

**Interdisciplinary links: "** **Social Medicine, Public Health and Scientific Methods of Investigations in Medicine " is integrated with the disciplines:** "Fundamentals of public health", "Informatization in public health", "Surveillance and assessment of health and well-being of the population", " Economics and financing of health care ", as well as with elective courses" Legal aspects of medical activities "," Ethical norms in public health "," Quality management in health care "," Fundamentals of evidence-based medicine ".

The discipline belongs to the elective disciplines.

The syllabus is organized with the application of modern pedagogical principles of organization of the educational process of higher education.

General approach: the study of the discipline involves the acquisition of theoretical knowledge and practical skills in the organization of health care and their application in the practice of public health, in particular, higher education students should be familiar with basic health care systems, their special features; to find out modern problems of providing medical care to the population; to study the legal documents on the organization of public health; to study the contemporary state and prospects of reforming the health care system of Ukraine; to get acquainted with the basic principles and features of the organization of primary, outpatient (specialized and highly specialized), inpatient medical care; to study the features of medical and social support of the elderly population, palliative and hospice care; to master the peculiarities of the organization and content of the work of the institutions of the system of maternity and childhood protection; learn the content and principles of analysis of the emergency (ambulance) service; master the methods of conducting expert assessments of the quality of medical care and analysis of factors influencing the activities of health care facilities; master the theoretical and practical principles of the organization of the examination of disability; to get acquainted with the peculiarities of health care management and management decisions; to get acquainted with the modern system "Electronic Health" and to study the peculiarities of the use of electronic means in health care in modern conditions.

To successfully complete the course, the students must timely perform all the tasks of the teacher, in identifying questions or problems with their implementation contact the teacher in advance.

The study of the discipline ends with an exam, so in the process of studying various topics, it is advisable to pay attention to the questions submitted for the exam.

**COURSE OBJECTIVE:**

***mastering by students of modern knowledge of the organization of the health care system in the country as a whole and in certain areas, its legal regulation and trends and prospects of health care reform, as well as mastering the skills of using this knowledge in professional activities in public health.***

In particular, students must:

– know: basic theoretical concepts of health care organization; types of health care systems, their characteristics, advantages and disadvantages; the essence and key aspects of the organization of health care in Ukraine, the strategy and main characteristics and problems of health care reform; regulatory support in health care; the essence of primary care and features of its organization; types of medical care according to the content and degree of complexity and principles of organization of specialized and highly specialized medical care, institutions and doctors who provide them; features of inpatient care, its reform and organizational forms of medical care for certain groups; the essence of hospital districts, the principles of their creation and the role in the modern health care system; content, significance and features of the organization of medical care for the elderly, palliative and hospice care; the essence and content of the system of maternity and childhood protection, the organization of work of institutions of the maternity and childhood protection system; the content of emergency medical care, its system, tasks and features of reform, structure, tasks and functions, interaction with various medical institutions; basic concepts and terms of quality of medical care, methods of quality assessment; factors influencing the efficiency of health care facilities and the use of statistical methods to analyze the activities of health care facilities and determine the impact of factors; features of the organization of medical examination of disability; basic principles of health care management and management decision-making, personnel management; features of the modern e-health system and the provision of information, resources and health services using electronic means.

– learn to: distinguish between types of health care systems, identify their advantages and disadvantages, characterize the financial and personnel support of health care systems; work with legal documents in the field of health care; work with information from various sources on the reform of the health care system of Ukraine, identify problems, the state and prospects of reforms and the state of the health care system; apply knowledge of the organization of health care in the country, the peculiarities of the health care system of Ukraine as a whole and its main directions to analyze the situation, identify problems and complex issues, as well as develop and implement measures in public health, identify areas and organizations of the health care system that can be involved in certain areas of professional activity in public health, the establishment of inter-sectoral cooperation; analyze the activities of the health care system at different levels and directions, properly coordinate activities in the field of public health with the peculiarities of the organization of medical care and develop proposals and measures to improve it, increase the efficiency of the public health system on this basis; apply methods for assessing the quality of medical care to the population and develop appropriate recommendations and measures to improve it; analyze the factors influencing the activities of health care facilities and develop measures to improve the provision of medical care; understand, analyze and use in practice the knowledge and skills of medical examination of disability; apply in professional activities the basic knowledge of health care management, make balanced and justified management decisions; use electronic means and electronic information resources and systems for collecting and analyzing information in the field of health care, optimizing the provision of medical services.

**COMPETENCIES**

In accordance with the requirements of the standard, the discipline provides students with the acquisition of ***competencies*:**

* *integral:*

Ability to solve typical and complex specialized problems and practical problems in professional activities in the field of health care, or in the learning process, which involves research and / or innovation and is characterized by complexity and uncertainty of conditions and requirements.

* *common:*
* ability to abstract thinking, analysis and synthesis;
* ability to apply knowledge in practical situations;
* ability to communicate in the state language both orally and in writing;
* skills of using information and communication technologies;
* ability to learn and master modern knowledge;
* ability to search, process and analyze information from various sources;
* ability to communicate with representatives of other professional groups of different levels (with experts from other fields of knowledge / types of economic activity);
* ability to be critical and self-critical;
* ability to make reasonable decisions;
* ability to develop and manage projects;
* ability to act socially responsibly and consciously;
* ability to preserve and increase moral, cultural, scientific values ​​and achievements of society based on understanding the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, techniques and technologies , use different types and forms of physical activity for active recreation and a healthy lifestyle;
* ability to be aware of equal opportunities and gender issues.
* *special (professional, subject):*
* ability to assess, interpret, compare and predict key public health indicators;
* the ability to develop and propose scientifically substantiated options for strategies, policies and measures aimed at preserving and strengthening the health of the population, as well as to evaluate their effectiveness;
* ability to organize public health surveillance activities using a cross-sectoral approach;
* ability to analyze the impact of various determinants on public health and justify appropriate measures to prevent them;
* ability to assess risks and justify appropriate action in response to public health emergencies;
* ability to analyze public health strategies, policies and interventions and propose measures to improve the efficiency of available funds;
* ability to create a team for public health activities and ensure its effective operation;
* ability to develop projects for the provision of public health services and prevention (primary, secondary and tertiary) of diseases, health promotion, and ensure their implementation;
* ability to apply different methods, strategies and models of teaching public health;
* ability to apply scientific approaches to research design planning, data collection, dissemination and exploitation of public health research results;
* ability to teach the basics of public health in educational institutions of different levels, to plan and implement activities aimed at building the appropriate level of human resources for public health;
* ability to mentor and promote the continuing professional development of public health professionals;
* ability to perform management functions and organize the provision of public health services, to ensure quality control of services provided at the appropriate level.

**ORGANIZATION OF TRAINING**

|  |  |  |  |
| --- | --- | --- | --- |
| Name  оf  indicators | Field of knowledge, direction of training, educational and qualification level | Characteristics  of  the discipline | |
| **full-time education** | |
| Number of credits – 3 | Direction of training  22 «Health care»  (code and name) | Normative | |
| Total number of hours - 90 | Specialty:  222 "Medicine"  (code and name) | **Year:** | |
| 3 |  |
| **Semester** | |
| 5 | 6 |
| Hours for full-time study:  classroom – 50  independent work of the student – 40 | Education level:  master | **Lectures** | |
| 20h. | h. |
| **Practical, seminar** | |
| 30 h. | h. |
| **Independent work** |  |
| 40 h. | h. |
| **Individual work:** | |
| h. |  |
| **Type of control:** | |
|  | credit |  |

**The structure of the discipline**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| The name of the sections of the discipline and topics | Number of hours | | | | | |
| Form of study (full day or evening) | | | | | |
| total | Including | | | | |
| lec | p | lab | indiv.w. | indep.  w. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| **Discipline section 1. Biostatistics** | | | | | | |
| Topic 1. Social medicine and public health as a science. Its tasks and methods. History of formation | 3 | 2 | 1 |  |  |  |
| Topic 2. Theoretical and methodological foundations of medical statistics | 3 | 2 | 1 |  |  |  |
| Topic 3. Organization, planning and conduct of statistical (epidemiological) research. Development of a plan and program of statistical research | 4 |  | 2 |  |  | 2 |
| Topic 4. Relative values, methods of their calculation. Graphic representation of statistics | 6 | 2 | 2 |  |  | 2 |
| Topic 5. Characteristics and analysis of statistical data. Average values. Indicators of variation | 6 | 2 | 2 |  |  | 2 |
| Topic 6. Characteristics of the diversity of the sign. Methods for assessing the degree of heterogeneity of the studied feature | 4 |  | 2 |  |  | 2 |
| Topic 7. Estimation of reliability of statistical researches | 3 | 1 |  |  |  | 2 |
| Topic 8. Parametric methods for estimating the reliability of statistical data and hypothesis analysis | 4 |  | 2 |  |  | 2 |
| Topic 9. Non-parametric methods for estimating the reliability of statistical data and hypothesis analysis | 4 |  | 2 |  |  | 2 |
| Topic 10. Analysis of the relationship between the studied parameters of statistical aggregates (correlation-regression analysis) | 5 | 1 | 2 |  |  | 2 |
| Topic 11. The method of standardization, its application in statistical research | 4 |  | 2 |  |  | 2 |
| Topic 12. Dynamical series. Types and methods of their analysis. | 4 |  | 2 |  |  | 2 |
| Topic 13. Fundamentals of modern epidemiology and its features | 4 | 2 |  |  |  | 2 |
| Topic 14. Design of empirical epidemiological research methods | 4 | 2 |  |  |  | 2 |
| Topic 15. Design of experimental epidemiological research methods | 3 | 2 |  |  |  | 1 |
| Topic 16. Design of epidemiological studies: case-control, cohort, randomized clinical trials. Gold standard. | 3 |  | 2 |  |  | 1 |
| Topic 17. The role of anamnestic technologies in obtaining primary information in a statistical study. Screening. Methodology for assessing the sensitivity and specificity of screening tests | 4 |  | 2 |  |  | 2 |
| Topic 18. Risk factors and their detection. Methods of calculation and analysis of risk indicators. | 4 |  | 2 |  |  | 2 |
| Topic 19. Fundamentals of evidence-based medicine and the relevance of its implementation in modern practice | 3 | 2 |  |  |  | 1 |
| Topic 20. Information support of epidemiological and clinical research. Systematic reviews and goal - analysis. | 3 | 2 |  |  |  | 1 |
| Topic 21. Review of modern methods of statistical analysis (dispersion, multifactor, cluster). | 1 |  |  |  |  | 1 |
| Topic 22. Medical statistics, the role in the analysis of public health and the health care system. Electronic document management. | 1 |  |  |  |  | 1 |
| Topic 23. Public healthcare databases. Organizing and conducting statistical surveys in public health. | 2 |  |  |  |  | 2 |
| Topic 24. The use of knowledge of biostatistics in the daily practice of the doctor. Software of statistical researches and the order of presentation of scientific works. | 2 |  |  |  |  | 2 |
| Topic 25. Registration of results of statistical research. Basics of preparation of a scientific publication. | 4 |  | 2 |  |  | 2 |
| Final lesson | 2 |  | 2 |  |  |  |
| Total with section 1 | ***90*** | ***20*** | ***30*** | ***-*** | ***-*** | ***40*** |

**Lecture topics**

|  |  |  |
| --- | --- | --- |
| № | Name topics | Number of hours |
|  | **SECTION 1. BIOSTATISTICS** |  |
| 1 | Social medicine and public health as a science, tasks, methods. History of formation. | 2 |
| 2 | Theoretical and methodical bases of medical statistics. | 2 |
| 3 | Relative values, their characteristics and graphical methods of analysis. | 2 |
| 4 | Characteristics and analysis of statistical data. Average values. Indicators of variation. | 2 |
| 5 | Assessment of the reliability of statistical studies. Analysis of the relationship between the studied parameters of statistical populations. | 2 |
| 6 | Fundamentals of modern epidemiology and their features. | 2 |
| 7 | Design of empirical epidemiological research methods. | 2 |
| 8 | Design of experimental epidemiological research methods. | 2 |
| 9 | Fundamentals of evidence-based medicine and the relevance of its implementation in modern practice. | 2 |
| 10 | Information and methodological support of epidemiological research based on evidence-based medicine. | 2 |
|  | **Together by section** | **20** |

**Topics of practical classes**

|  |  |  |
| --- | --- | --- |
| № | Name topics | Number of hours |
|  | **SECTION 1. BIOSTATISTICS** |  |
| 1 | Social medicine and public health as a science and teaching subject. Medical statistics. Methodological foundations of the organization of statistical research in the health care system. | 2 |
| 2 | Organization, planning and implementation of statistical (epidemiological) research. Development of a plan and program for statistical research. | 2 |
| 3 | Relative values, method of calculating them. Graphical representation of statistical data. | 2 |
| 4 | Variation series. Average values, methods of their calculation. | 2 |
| 5 | Characteristics of the diversity of the sign. Methods for assessing the degree of heterogeneity of the trait being studied. | 2 |
| 6 | Parametric methods for assessing the reliability of statistical data and hypothesis analysis. | 2 |
| 7 | Nonparametric methods for assessing the reliability of statistical data and hypothesis analysis. | 2 |
| 8 | Analysis of the relationship between the studied parameters of statistical aggregates (correlation-regression analysis). | 2 |
| 9 | Standardization method, its application in statistical research. | 2 |
| 10 | Time series. Types and methods of their analysis | 2 |
| 11 | Design of epidemiological studies: case-control, cohort, randomized clinical trials. Gold standard. | 2 |
| 12 | The role of anamnestic technologies in obtaining primary information in statistical research. Screening. Methodology for assessing the sensitivity and specificity of screening tests. | 2 |
| 13 | Risk factors and their detection. Methodology for calculating and analyzing risk indicators. | 2 |
| 14 | Registration of the results of statistical research. Basics of preparing a scientific publication. | 2 |
| 15 | Final lesson | 2 |
|  | **Together by section** | 30 |

**Independent work**

|  |  |  |
| --- | --- | --- |
| № | Name topics | Number of hours |
|  | **SECTION 1. BIOSTATISTICS** |  |
| 1 | Organization, planning and implementation of statistical (epidemiological) research. Development of a plan and program for statistical research. | 2 |
| 2 | Relative values, methods of their calculation. Graphic representation of statistics. | 2 |
| 3 | Characteristics and analysis of statistical data. Average values. Indicators of variation. | 2 |
| 4 | Characterization of the diversity of the trait. Methodology for assessing the degree of heterogeneity of the studied trait. | 2 |
| 5 | Estimation of reliability of statistical researches. | 2 |
| 6 | Parametric methods for assessing the reliability of statistical data and hypothesis analysis. | 2 |
| 7 | Nonparametric methods for assessing the reliability of statistical data and hypothesis analysis. | 2 |
| 8 | Analysis of the relationship between the studied parameters of statistical populations (correlation and regression analysis). | 2 |
| 9 | Standardization method, its application in statistical research. | 2 |
| 10 | Time series. Types and methods of their analysis. | 2 |
| 11 | Fundamentals of modern epidemiology and its features. | 2 |
| 12 | Design of empirical epidemiological research methods. | 2 |
| 13 | Design of experimental epidemiological research methods. | 1 |
| 14 | Design of epidemiological studies: case-control, cohort, randomized clinical trials. Gold standard. | 1 |
| 15 | The role of anamnestic technologies in obtaining primary information in statistical research. Screening. Methodology for assessing the sensitivity and specificity of screening tests. | 2 |
| 16 | Risk factors and their detection. Methodology for calculating and analyzing risk indicators. | 2 |
| 17 | The basics of evidence-based medicine and the relevance of its implementation in modern practice. | 1 |
| 18 | Information support of epidemiological and clinical research. Systematic reviews and meta-analysis. | 1 |
| 19 | Review of modern methods of statistical analysis (variance, multifactor, cluster). | 1 |
| 20 | Medical statistics, role in the analysis of public health and the health care system. Electronic document management. | 1 |
| 21 | Public health databases. Organizing and conducting statistical surveys in public health. | 2 |
| 22 | Using knowledge of biostatistics in the daily practice of a doctor. Statistical research software and the procedure for submitting scientific papers. | 2 |
| 23 | Registration of the results of statistical research. Basics of preparing a scientific publication. | 2 |
|  | **Together by section** | **40** |

**Individual tasks**

Individual work of higher education students under the guidance of a teacher of " Social Medicine, Public Health and Scientific Methods of Investigations in Medicine " is carried out during the semester in the form of: study of literature sources recommended for mastering topics and problems and preparing reports on them; study of normative documents recommended for studying various topics of the discipline; work with the electronic system; performance of individual tasks.

Extramural education students must complete an individual task and send it to the teacher for verification (by e-mail) no later than 10 days before the start of the training session.

Tasks (topics) for individual work students choose from the proposed list. Students can also independently propose a topic for an individual task, based on the scope of their research interests or practical activities, and they must agree it with the teacher.

Criteria for evaluating an individual task. The work should have a volume of 10-16 pages of standard text (sheet size A4, type - Times New Roman, size of type - 14, interlinear interval – 1,5, paragraph indent – 1,25, alignment in width, between paragraph indents are absent) and fully disclose the content of selected issues. The work should be structured and contains a list of used literature sources, designed in accordance with existing requirements. The work must be submitted for review within the specified time.

Inconsistency of content, too much or too little work, non-compliance with formal requirements for registration, lack of a list of sources used or its incorrect design, insufficient structure of work, late submission of work for review are grounds for lowering the assessment or returning work for revision.

**Topics of individual tasks**

1. Specialized dispensaries in Ukraine: activities and prospects for development.

2. Perinatal centers - a new form of maternal and child health care. Causes and consequences of implementation.

3. The problem of infertility in Ukraine. Reproductive health centers. The problem of in vitro fertilization.

4. Orphanages as institutions of medical and social protection: problems and prospects of development.

5. Specialized institutions for the elderly (geriatric service): present and prospects for development.

7. Development of insurance medicine in Ukraine. History and modernity.

8. Sanatorium and resort service in Ukraine: a network of institutions, their activities and prospects for development.

9. Financing of the health care system in Ukraine and abroad: problems, reforms.

10. Medical education in Ukraine. The system of advanced training of doctors: institutions, certification, categories.

11. Staffing of the health care system in Ukraine.

12. Pharmaceutical industry in Ukraine: network of institutions, activities and prospects for development.

13. E-health. Structure, resources, services.

14. Medical science in Ukraine: a network of research institutions, scientific degrees in medicine, the National Academy of Medical Sciences of Ukraine.

15. Criteria for medical and social efficiency of medical institutions in different countries (on the example of a particular country).

**Teaching methods**

Problem, multimedia and lecture-conversation; creative and problem discussions, visual illustrations, discussions, oral interviews, written tests, tests, written creative work, independent work, game methods, solving situational and practical problems, as well as independent work of higher education students with information sources and regulations.

**Types of control:** *current and final.*

**EVALUATION**

The form of final control of the discipline is a test, which is conducted by the teacher of the academic group in accordance with the schedule of tests approved by the university.

**Evaluation of current educational activities (CEA)**

The current educational activity of students is monitored by the teacher of the academic group, after the students have mastered each topic of the discipline and grades are given using a 4-point (national) system. At the end of the semester, the teacher automatically receives the average grade (to the nearest hundredths) for the current educational activity using the electronic journal of the ACS system.

The recalculation of the average assessment of current activities into a multi-point scale is carried out in accordance with the "Instructions for assessing the educational activities of students ...". The final grade for current educational activity in the semester is determined as the arithmetic mean of national grades for each lesson and software, rounded to 2 decimal places and listed in a multi-point scale according to Table 1.

Table 1

**Recalculation of the average score for current activities in a multi-point scale**

**(for disciplines ending with a credit)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 4-point scale | 200-point scale |  | 4-point scale | 200-point scale |  | 4-point scale | 200-point scale |
| 5 | 200 | 4.22-4,23 | 169 | 3.45-3,46 | 138 |
| 4.97-4,99 | 199 | 4.19-4,21 | 168 | 3.42-3,44 | 137 |
| 4.95-4,96 | 198 | 4.17-4,18 | 167 | 3.4-3,41 | 136 |
| 4.92-4,94 | 197 | 4.14-4,16 | 166 | 3.37-3,39 | 135 |
| 4.9-4,91 | 196 | 4.12-4,13 | 165 | 3.35-3,36 | 134 |
| 4.87-4,89 | 195 | 4.09-4,11 | 164 | 3.32-3,34 | 133 |
| 4.85-4,86 | 194 | 4.07-4,08 | 163 | 3.3-3,31 | 132 |
| 4.82-4,84 | 193 | 4.04-4,06 | 162 | 3.27-3,29 | 131 |
| 4.8-4,81 | 192 | 4.02-4,03 | 161 | 3.25-3,26 | 130 |
| 4.77-4,79 | 191 | 3.99-4,01 | 160 | 3.22-3,24 | 129 |
| 4.75-4,76 | 190 | 3.97-3,98 | 159 | 3.2-3,21 | 128 |
| 4.72-4,74 | 189 | 3.94-3,96 | 158 | 3.17-3,19 | 127 |
| 4.7-4,71 | 188 | 3.92-3,93 | 157 | 3.15-3,16 | 126 |
| 4.67-4,69 | 187 | 3.89-3,91 | 156 | 3.12-3,14 | 125 |
| 4.65-4,66 | 186 | 3.87-3,88 | 155 | 3.1-3,11 | 124 |
| 4.62-4,64 | 185 | 3.84-3,86 | 154 | 3.07-3,09 | 123 |
| 4.6-4,61 | 184 | 3.82-3,83 | 153 | 3.05-3,06 | 122 |
| 4.57-4,59 | 183 | 3.79-3,81 | 152 | 3.02-3,04 | 121 |
| 4.54-4,56 | 182 | 3.77-3,78 | 151 | 3-3,01 | 120 |
| 4.52-4,53 | 181 | 3.74-3,76 | 150 | **Less than 3** | **Not enough** |
| 4.5-4,51 | 180 | 3.72-3,73 | 149 |  |  |
| 4.47-4,49 | 179 | 3.7-3,71 | 148 |
| 4.45-4,46 | 178 | 3.67-3,69 | 147 |  |  |
| 4.42-4,44 | 177 | 3.65-3,66 | 146 |  |
| 4.4-4,41 | 176 | 3.62-3,64 | 145 |  |  |
| 4.37-4,39 | 175 | 3.6-3,61 | 144 |  |  |
| 4.35-4,36 | 174 | 3.57-3,59 | 143 |  |  |
| 4.32-4,34 | 173 | 3.55-3,56 | 142 |  |  |
| 4.3-4,31 | 172 | 3.52-3,54 | 141 |  |  |
| 4,27-4,29 | 171 | 3.5-3,51 | 140 |  |  |
| 4.24-4,26 | 170 | 3.47-3,49 | 139 |  |  |

**Discipline grade**

Since the discipline is studied for 2 or more semesters, the grade for the discipline is defined as the arithmetic mean of the current educational activities scores for both semesters during which the discipline was studied, which are transferred to the 120-point ECTS scale (Table 1) with the addition of points obtained directly on the exam.

The maximum number of points that a student can score for studying a discipline is 200 points, including the maximum number of points for current educational activities - 120 points, as well as the maximum number of points based on the exam results - 80 points. The minimum number of points is 120, including the minimum current educational activity - 70 and according to the exam results - 50 points.

**Discipline assessment technology.**

The evaluation of the results of studying the discipline is carried out directly during the test. The grade for the discipline is determined as the sum of points on the current educational activity and is min - 120 to max - 200. The correspondence of the grades for the 200 point scale, the four-point (national) scale and the ECTS scale is shown in Table 4.

Table 4

**Correspondence of grades on the 200-point scale,**

**four-point (national) scale and the ECTS scale**

|  |  |  |
| --- | --- | --- |
| Score on a 200-point scale | Score on the ECTS scale | Score on a four-point (national) scale |
| 180–200 | А | Perfectly |
| 160–179 | В | Fine |
| 150–159 | С | Fine |
| 130–149 | D | Satisfactorily |
| 120–129 | E | Satisfactorily |
| Less than 120 | F, Fx | Unsatisfactorily |

The grade in the discipline is given only to students who have passed all the final classes, credits.

Students who do not meet the requirements of the curriculum of the disciplines are given an **FX** grade, if they were admitted to the differentiated test or exam, but did not pass it. A grade of **F** is given to students who are not allowed to take a differentiated test or exam.

Grades "**FX**" or "**F**" ("unsatisfactory") are given to students who are not credited with the study of the discipline, the form of control of which is credit.

After completing the study of the discipline responsible for the organization of educational and methodical work at the department or the teacher puts the student's grade on the scales (Table 4) in the record book and fill in the progress of students in the discipline forms: U-5.03A – **credit**.

**COURSE POLICY**

The policy of the course is to adhere to the Code of Ethics concluded by the university community, which defines the basic moral principles (Code of Corporate Ethics of KhNMU is presented on the website http://knmu.edu.ua)

According to the current "Guidelines for the evaluation of educational activities in the European credit transfer system for the organization of the educational process" students for higher education must receive an assessment for each topic of the discipline. If the student has missed a training lesson, he must complete it in accordance with the "Regulations on the procedure for training of students of the Kharkiv National Medical University". Working off are conducted daily to the duty teacher of the department.

If the applicant did not pass the individual task on time for a good reason, it is necessary to notify the teacher of this situation and set a new deadline. If the student does not have time to complete an individual task, he can ask the teacher to postpone the deadline justifying the reason for late performance (the teacher decides in each situation whether it makes sense to extend the deadline and for how long).

In case of non-fulfillment of tasks during training lessons, or non-fulfillment of a part of such lesson, the teacher gives an unsatisfactory grade, which the student must reassign to the teacher in free time of teacher and the student, that should be appointed in advance.

During the lecture, students of higher education are recommended to keep a synopsis of the lesson and keep a sufficient level of silence.

During the practical classes a sufficient level of preparedness of students for them and active participation in the work and performance of the tasks set by the teacher is expected. In particular, active participation is expected during the discussion in the audience, students must be ready to understand the material in detail, ask questions, express their views, discuss. During classes are important:

* respect for colleagues, politeness and politeness,
* tolerance for others and their experiences,
* susceptibility and impartiality,
* ability to disagree with the opinion, but to respect the personality of the opponent / s),
* careful argumentation of one's opinion and courage to change one's position under the influence of evidence,

- self-expression, when a person avoids unnecessary generalizations, describes his feelings and formulates his wishes based on their own thoughts and emotions,

- obligatory acquaintance with primary sources, readiness for lesson.

A creative approach in its various manifestations is welcome. Students from higher education are expected to be interested in participating in various scientific and communicative activities in the subject profile.

Successful completion of the course requires adherence to academic integrity, knowledge and ability to use in preparation for classes and tasks Regulations on the examination of text documents at Kharkiv National University - dissertations, research reports, scientific publications, materials of scientific forums, educational literature, educational and methodical publications and teaching aids for the presence of text borrowings.

**Behavior in the audience**

**Basic "yes" and "no"**

It is important for higher education students to follow the rules of good behavior at the university. These rules are common to all, they also apply to all faculty and staff, and are not fundamentally different from the generally accepted norms. Applicants must wear medical gowns (professional clothing) during classes.

During classes it is allowed:

- leave the audience for a short time if necessary and with the permission of the teacher;

- drink water;

- take photos of presentation slides;

- take an active part in the class.

* forbidden:
* eat (except for persons whose special medical condition requires another - in this case, medical confirmation is required);
* smoking, drinking alcohol and even low-alcohol beverages, beverages other than water, as well as drugs;
* to use obscene language or use words that offend the honor and dignity of colleagues and faculty;
* gaff;

- damage the material and technical base of the university (damage inventory, equipment; furniture, walls, floors, litter the premises and territories);

- shouting, shouting or listening to loud music in classrooms and even in corridors during classes.

**Labor protection**

The first lesson of the course will explain the basic principles of labor protection by conducting appropriate training. It is expected that everyone should know where the nearest evacuation exit to the audience, where the fire extinguisher is, how to use it, and so on.

**Recommended literature**

**Basic literature**

1. Abhaya Indrayan, Rajeev Kumar Malhotra Medical Biostatistics 4th edition / I. Abhaya, R. Malhotra. – Chapman&Hall/CRC Biostatistics Series, 2017. – 994 p. URL : [https://www.routledge.com/Medical -Biostatistics/Indrayan-Malhotra/p/book/971498799539](https://www.routledge.com/Medical%20-Biostatistics/Indrayan-Malhotra/p/book/971498799539)
2. Alderson Michael R. Mortality, Morbidity and Health Statistics : textbook / M. Alderson. – London: Palgrave, 1988. – 501 p. URL : <https://link.springer.com/book/10.1007/978-1-349-09068-6#toc>
3. Detels Roger, Beaglehole Robert, Lansang Mary Ann, Gulliford Martin Oxford Textbook of Public Health Online (Oxford Medical Publicaions) 5th edition / R. Detels et al. – Oxford: Oxford University Press, 2011.- 1769 p. URL : <https://www.amazon.com/Oxford-Textbook-Public-Medical-Publications/dp/0199693471>
4. Devakumar Delan, Hall Jennifer, Qureshi Zeshan, Lawn Joy The Unofficial Guide to Medicine : textbook / D. Devakumar et al. – Oxford: University Press, URL : <https://unofficialguidetomedicine.com/oxford-textbook-of-global-health-of-women-newborns-children-and-adolescents/>
5. Medical Book Online Park’s Textbook of Preventive And Social Medicine – 24th Edition 2020 URL : <https://medicalbooknew.com/medical-book-online-parks-textbook-of-preventive-and-social-medicine-24th-edition2020>
6. Methodical materials on the subject “Public Health” developed by teachers of Public Health and Healthcare Management Department (KhNMU).
7. Summary of Lectures lectures in Public Health / Kharkiv National Medical University, Department of Public Health and Healthcare Management.

**Additional literature**

1. Detels Roger, Gulliford Martin, Quarraisha Abdool Karim, Chorh Chuan Tan Oxford Textbook of Global Public Health, 6th edition / R. Detels et al. – Oxford: Oxford University Press, 2017. – 1728 p. URL : <https://global.oup.com/academic/product/oxford-textbook-of-global-public-health-9780198810131?cc=ua&lang=en&>
2. International Encyclopedia of Public Health, 2nd Edition / Editor in Chief: Stella R. Quah. – Singapore: Academic Press, 2017. – 4470 p. URL : <https://www.elsevier.com/books/international-elcyclopedia-of-public-health/quah/978-0-12-803678-5>
3. Tulchinsky Theodore, Varavikova Elena The New Public Health, 3rd Edition / T. Tulchisky, E. Varavikova. – Toronto: Academic Press, 2015. – 912 p. URL : <https://www.elsevier.com/books/the-new-public-health/tulchinsky/978-0-12-415766-8>
4. White Kenneth R., Griffith John R. The Well-Managed Healthcare Oganization, 9th Edition / K. White, J. Griffith. – USA: Health Administration Press, 2019. – 558 p. URL : <https://www.amazon.com/Well-Managed-Healthcare-Organization-AUPHA-Book/dp/1640550585>

**Information Resources**

1. European Health for All Database (HFA-DB) [electronic resource] – [www.euro.who.int/hfadb/](http://www.euro.who.int/hfadb/)
2. National Scientific Medical Library of Ukraine – <http://www.library.gov.ua/>
3. Population of Ukraine. Demographic Yearbook – [www.ukrstat.gov.ua](http://www.ukrstat.gov.ua)
4. Scientific Library of Kharkiv National Medical University – <http://libr.knmu.edu.ua/index.php/biblioteki>
5. U.S. National Library of Medicine – <http://www.nlm.nih.gov/>
6. Vernadsky National Library of Ukraine – <http://www.nbuv.gov.ua/>

**LIST OF QUESTIONS TO THE CREDIT:**

1. Basic principles of health care in Ukraine. Legal principles of health care.

2. Health systems: goals, functions. Types of health care systems, characteristics, advantages and disadvantages.

3. Reforms in the health care system of Ukraine: reforms in the provision of services, financing, staffing and health care management.

4. Organizational principles of medical care. Types of medical care and facilities that provide it.

5. Definition of "primary health care" (PMC). Basic principles of PMC on the basis of family medicine. Primary care centers.

6. Characteristics of existing organizational models of family doctors. Possible organizational models of family medicine in Ukraine.

7. Tasks and content of the family doctor's work, cooperation with various health care institutions, with social services. The role of primary health care centers in the medical care of the population.

8. Organization of outpatient (specialized and highly specialized) medical care for the population.

9. Content of secondary (specialized) and tertiary (highly specialized, high-tech, highly qualified) inpatient care. Institutions providing inpatient care.

10. Measures for the rational use of bed stock. The role of continuity between outpatient and hospital facilities.

11. The value of inpatient care, its organizational forms. Functions and structure of the day hospital.

12. Accounting for hospitals, methods of determining and analyzing indicators of their activities.

13. Features of medical care of the rural population; factors that affect it.

14. Hospital district: the principle of creation and characteristics of institutions.

15. Emergency medical care: system, principles, tasks, performance indicators of institutions. Organization of emergency medical care in rural areas.

16. Centers for emergency medical care and disaster medicine. Hospital and ambulance stations, main tasks and functions.

17. Medical and preventive institutions for obstetric and gynecological care, features of their formation in urban and rural areas; organization and content of their activities.

18. Expert assessment of organizational elements of medical care for pregnant women and women with gynecological diseases.

19. Perinatal center. Maternity hospital. Women's consultation. Tasks, content of work, structure, indicators of activity, features of interaction between themselves and establishments providing primary medical care.

20. Institutions that provide medical care to children, their structure and functions. The main sections of the work of a pediatrician, family doctor. Organization of specialized medical care for children.

21. Organization of medical examination of disability. Types of temporary incapacity for work, features of examination for certain types of incapacity for work. Tasks of attending physicians and DCC during the examination of temporary disability.

22. Organization of examination of permanent disability. Types of disability. Medical and social expert commissions (MSEC), their types, functions.

23. Components of quality: structural quality; quality of technologies; quality of results. Indicators of quality and efficiency of medical care. Application of clinical protocols and medical standards.

24. Factors affecting the efficiency of health care facilities. Basic approaches to developing measures to improve health care.

25. Medical and social provision of the elderly population. Palliative and hospice care, principles of organization.

26. The concept of "health insurance". Features of the implementation of compulsory and voluntary health insurance. Problems of introduction of insurance medicine in Ukraine.

27. The essence of the science of management, its subject. Principles of management. Components of the management process. Management decision.

28. Awareness of mental health in society. Organization of mental health care at the level of primary health care, preventive and rehabilitation measures.

29. E-health. Structure, resources, services.

30. World Health Organization (WHO). Purpose and history of creation, tasks. Importance of WHO activities for the countries of the world and Ukraine.