

**MINISTRY OF HEALTH PROTECTION OF  
UKRAINE  
ODESSA NATIONALMEDICAL UNIVERSITY**  
Department of general and clinical epidemiology and  
biosafety with a course in microbiology and virology

**Syllabus of the academic discipline**  
"Social medicine, public health"

<b>Scope of the academic discipline</b>	Total number of hours per discipline: 90 hours, 3 credits. Semesters: III - IV. 2 year of study.
<b>Days, time, place of educational discipline</b>	According to the schedule of classes. Department of general and clinical epidemiology and biosafety with a course in microbiology and virology, Odesa, 13 Prymorsky Boulevard.
<b>Teacher(s)</b>	Golubyatnikov M. I., doctor of medicine, professor, head of the department Professors: Doctor of Medicine Bachynska O.V., Doctor of Medicine. A. I. Savchuk, Doctor of Medicine. K.O. Talalaev, Doctor of Medicine. Haydey V.R. Associate professors: Servetskyi S.K., Fedorenko T.V. Assistants: T.V. Gerasimenko, G.M. Jurtubaeva, O.A. Melnyk, K.S. Hrytsenko, L.V. Kostolonova, M.O. Makarenko
<b>Contact Information</b>	Help by phone: Melnyk O.A., head of the department; telephone number - 0965920621, responsible for organizational and educational work of the department Gavrushko T.G., laboratory assistant of the department; phone number 0681241260 E-mail of the department: _____ Face-to-face consultations: from 2:00 p.m. to 5:00 p.m. every Thursday, from 9:00 a.m. to 2:00 p.m. every Saturday Online - consultations: with 16.00 to 18.00 every Thursday, from 9.00 to 14.00 every Saturday. The link to the online consultation is provided to each group during classes separately .

## COMMUNICATION

Communication with applicants will be conducted in the classroom (face-to-face).  
During distance learning, communication is carried out through the Microsoft Teams platform, as well as through e-mail correspondence, Viber messengers (through groups created in Viber for each group, separately through the head of the group).

### **ABSTRACTEDUCATIONAL DISCIPLINE**

*Subject of discipline study*—modern principles of evidence-based medicine, theoretical and methodological foundations of biostatistics, patterns of population health.

*Prerequisites and post-requisites of the discipline (place of the discipline in the educational program):*

The study of the discipline ends with a test, therefore, in the process of covering various topics, it is advisable for students to pay attention to the questions that are presented to them.

*Purpose of the discipline:*acquiring the necessary knowledge, skills and competences related to research, analysis and assessment of population health indicators, organization, resource provision and activities of the health care system; development of recommendations from the standpoint of evidence-based medicine on prevention and elimination of the harmful effects of factors on health and on improving the organization of medical assistance to the population and the public health system.

*Tasks of the discipline:*

1. learn the theoretical foundations, modern principles, regularities and legal foundations of public health and its protection systems in the context of preserving and strengthening the health of the population;
2. interpret the main methods of determining and assessing the state of health of the population in relation to the factors affecting it;
3. to work out measures regarding the organization of the activity of the family doctor and ways of its improvement;
4. to be able to fill in basic accounting medical documentation and analyze reporting forms of the medical service;
5. to develop administrative preventive solutions aimed at strengthening and preserving the health of people of different ages;
6. to understand the content of market transformations in the practical activities of medical institutions and individual practicing doctors;
7. develop management solutions to meet the needs of the population in medical care.

*Expected results:*

*As a result of studying the academic discipline, the applicant must: Know:*

- definition of social medicine and health care organization as a science and subject of teaching, its importance for health care practice;
- peculiarities of interpretation of the concept of "health", indicators of population

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health;

- regularities in the formation of the demographic situation, its features in different countries;
- components of the medical and social significance of morbidity and methods of its study;
- classification of risk factors, assessment of their possible impact on public health;
- legal principles of modern health care;
- basic principles and types of medical assistance to the population, features of medical provision of various contingents of the urban and rural population (women, children, enterprise workers, elderly people);
- the organization and content of the work of medical institutions and doctors of the main specialties (family, district therapists and pediatricians, obstetricians-gynecologists, geriatricians, doctors of emergency medicine, hygienists, etc.).

*Be able:*

- fill out accounting documents for the study of population health indicators (demographic, morbidity, disability), activities of the main health care institutions;
- determine and evaluate health indicators, the activities of health care institutions using the appropriate statistical methods learned during the study of biostatistics;
- determine and analyze indicators of morbidity: general, infectious, hospitalized, for the most important socially significant diseases, with temporary loss of working capacity;
- evaluate indicators of physical development of the population and indicators of disability to characterize the health of the population;
- to analyze the peculiarities of the formation of a healthy lifestyle in certain population groups;
- interpret the features of medical assistance to the population;
- to analyze the expediency of implementing various models of primary medical care based on family medicine;
- determine the tactics in the process of examination of the loss of working capacity (temporary and permanent) with the filling of relevant documents;
- carry out an assessment of the quality of medical care;
- develop management solutions aimed at improving the health of the population and optimizing medical care
- use the skills of assessing the state of health of the population and the influence of determinants on it, risk assessment, as well as the development and implementation of preventive measures aimed at preserving, strengthening the health and social well-being of the population;
- use the skills of evaluating the health care system, institutions, divisions or health care specialists; identifying and eliminating negative factors influencing

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their work, as well as developing measures to improve the organization and improve the activities of health care professionals and institutions.

**DESCRIPTION OF THE COURSE DISCIPLINES**

*Forms and methods of education*

The discipline will be taught in the form of lectures (8 classroom hours), practical classes (48 classroom hours); self-organized work of the applicant (34 hours).

*Teaching methods:* Lectures. Practical classes: conversation, solving situational problems, practicing skills for working with medical documentation. Independent work: independent work with the textbook, independent work with the bank of test tasks Step-1, independent solution of situational tasks.

*Content of the academic discipline*

Topic 1. Social medicine and public health as a science. Evidence-based medicine, research methods and its significance for health care practice.

Topic 2. Relative values. Graphic representation of statistical data.

Topic 3. Variation series. Average values.

Topic 4. Method of standardization. Analysis of dynamic series. Risk factors. Methodology for calculating risk indicators and their assessment.

Topic 5. Assessment of the probability of research results. Parametric and non-parametric criteria for assessing the probability of obtained results. Correlation-regression analysis.

Topic 6. Design, methods of collecting statistical material and organization of statistical research. Screening. Types of questionnaires, compilation method.

Topic 7. Population health: the main determinants. Methods of study and assessment of factors affecting the health of the population.

Topic 8. Methods of studying and evaluating the main demographic indicators of the natural movement of the population. Analysis of the demographic situation.

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

Topic 10. Methods of studying and evaluating reproductive health indicators.

Topic 11. Methods of studying population morbidity. Calculation and evaluation of indicators of general morbidity and its varieties.

Topic 12. Methodology of study and assessment of incidence rates for the most important socially significant diseases. Methodological foundations of research on the burden of diseases.

Topic 13. Comprehensive assessment of population health. Analysis of indicators of physical development.

Topic 14. Methodology for analyzing the causes of social inequality in relation to health and its protection. Providing strategic leadership in the interests of health and well-being.

Topic 15. Family medicine. Primary, secondary and tertiary medical assistance

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to the population.

Topic 16. Emergency and urgent medical assistance to the population. Emergency situations in health care.

Topic 17. Organization of obstetric and gynecological care and medical care for children.

Topic 18. Organization of medical care for the elderly. Palliative and hospice care.

Topic 19. Organization of medical examination of disability. Temporary and permanent loss of working capacity, method of calculating indicators.

Topic 20. Information and explanatory activities (advocacy) as a component of medical prevention.

Topic 21. Health promotion. Types, forms and methods. Moral, ethical and legal aspects of health care interventions.

Topic 22. Communication and social mobilization in the interests of health. Press releases and communication with mass media.

Topic 23. Informatization of public health. Medical information systems in the world and in Ukraine..

Topic 24. Visualization and effective presentation of health data. Dissemination and use of results. Test.

*List of recommended literature:*

*Main:*

1. Biostatistics: a textbook / by general ed. T. S. Gruzeva. Vinnytsia: Nova Kniga, 2020. 384 p.
2. Public health: a study guide [Gruzheva T.S., Galienko L.I., Grechishkina N.V. etc.]; in general ed. Gruzevoy T.S., K.: Book-plus, 2021. 296 p
3. Oxford Textbook of Global Public Health, 6 edition. Edited by Rogers Detels, Martin Gulliford, Quarraisha Abdool Karim and Chorh Chuan Tan. - Oxford University Press, 2017. - 1728 p.

*Additional:*

1. Public health: textbook for students. higher med. education institutions - Kind. 3 - Vinnytsia: "New Book", 2013. - 560 p. Board Review in Preventive Medicine and Public Health. Gregory Schwaid. - ELSEVIER., 2017. - 450
2. Medical Statistics at a Glance Text and Workbook. Aviva Petria, Caroline Sabin. - Wiley-Blackwell, 2013. - 288 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. Fourth edition. David L. Katz, Joann G. Elmore, Dorothea MG Wild, Sean C. Lucan. - ELSEVIER., 2014. - 405 p.
5. Oxford Handbook of Public Health Practice, Fourth Edition. Charles Guest,

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Walter Ricciardi, Ichiro Kawachi, Iain Lang. - Oxford University Press, 2012. - 656 p.

6. Collection of test tasks for state tests in hygiene, social medicine, organization and economics of health care. Education manual. - Vinnytsia: New Book, 2012 - 200 p.
7. Methods of social medicine / ed. OHM. Ocheredko, O.H. Protsek - Vinnytsia: Thesis, 2007. - 410 p.

*Electronic information resources*

1. World Health Organization [www.who.int](http://www.who.int)
2. Cochrane Center for Evidence-Based Medicine [www.cebm.net](http://www.cebm.net)
3. Cochrane Library [www.cochrane.org](http://www.cochrane.org)
4. US National Library of Medicine - MEDLINE [www.ncbi.nlm.nih.gov/PubMed](http://www.ncbi.nlm.nih.gov/PubMed)
5. Canadian Center for Evidence in Health Care [www.cche.net](http://www.cche.net)
6. Center for Disease Control and Prevention [www.cdc.gov](http://www.cdc.gov)
7. Public Health Center of the Ministry of Health of Ukraine [www.phc.org.ua](http://www.phc.org.ua)
8. Ukrainian base medical and statistical information "Health for everyone." <http://medstat.gov.ua/ukr/news.html?id=203>
9. British Medical Journal [www.bmj.com](http://www.bmj.com)
10. Journal of Evidence-Based Medicine [www.evidence-basedmedicine.com](http://www.evidence-basedmedicine.com)

**EVALUATION**

- *Forms and methods of current control:* oral (survey), practical (solving clinical situational problems, practicing the skills of assessing the state of the population's health and the influence of determinants on it, risk assessment, as well as the development and implementation of preventive measures aimed at preserving, strengthening the health and social well-being of the population; practicing the skills of working with medical regulatory documents, determining and analyzing morbidity indicators: general, infectious, hospitalized, for the most important socially significant diseases, with temporary loss of working capacity

Current assessment criteria for practical training:

Rating	Evaluation criteria
Perfectly "5"	It is presented to the applicant when he shows deep, solid and systematic knowledge in the scope of the curriculum, answers all questions without mistakes, reasonably formulates conclusions, using the materials presented for the independent work of the applicant, competently and consistently, with knowledge of the methodology, completed practical work ; using scientific terms and concepts correctly.

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Fine "4"	The acquirer reveals the main content of the educational material; gives incomplete definitions of concepts; admits inaccuracies when using scientific terms, vaguely formulates conclusions, performed practical work, but made minor mistakes during the research.
Satisfactorily "3"	The acquirer reproduces the main educational material, but when teaching it, it allows essential errors, leads to simple examples definition concepts are insufficient, characterizes the general issues of social medicine.
Unsatisfactory "2"	The applicant discloses the content of the educational material fragmentarily, makes gross mistakes in the definition of concepts and when using terminology, did not complete the practical work.

Credit is given to the applicant who completed all tasks of the work program of the academic discipline, took an active part in practical classes, completed and defended an individual assignment and has an average current grade of at least 3.0 and has no academic debt.

Assessment is carried out in the last class before the beginning of the examination session (with the tape system of learning). The grade for the assessment is the arithmetic mean of all components on a traditional four-point scale and has a value that is rounded to 2 (two) decimal places using the statistical method.

The obtained average score for the academic discipline for applicants who have successfully mastered the work program of the academic discipline is converted from a traditional four-point scale to points on a 200-point scale, as shown in the table:

*Conversion table of a traditional assessment into a multi-point scale*

<b>Traditional four-point scale</b>	<b>Multipoint 200-point scale</b>
Excellent ("5")	185 - 200
Good ("4")	151 - 184
Satisfactory ("3")	120-150
Unsatisfactory ("2")	Below 120

## **INDEPENDENT WORK OF HIGHER EDUCATION ACQUISITIONS**

Independent work involves preparation for each practical session.

### **POLICY EDUCATIONAL DISCIPLINE**

*Deadlines and Rescheduling Policy:*

- Absences of classes for non-respectable reasons will be worked out according to the schedule of the teacher on duty.
- Absences for valid reasons are worked out according to an individual schedule with the permission of the dean's office.

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*Academic Integrity Policy:*

Applicants must observe academic integrity, namely:

- independent performance of all types of work, tasks, forms of control provided for by the work program of this educational discipline;
- references to sources of information in case of use of ideas, developments, statements, information;
- compliance with the legislation on copyright and related rights;
- granting reliable information about the results of own educational (scientific) activities, used research methods and sources of information.

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

- the use of family or official ties to obtain a positive or higher grade during any form of control of academic performance or academic merit;
- use of prohibited auxiliary materials or technical means (cheat sheets, notes, micro-earphones, telephones, smartphones, tablets, etc.) during control measures;
- going through procedures for monitoring the results of training by fake persons.

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

- a decrease in the results of assessment of the control work, assessment in class, credit, etc.;
- retaking the assessment (test, credit, etc.);
- assignment of additional control measures (additional individual tasks, control works, tests, etc.);
- conducting an additional inspection of other works authored by the violator.

*Attendance and Tardiness Policy:*

Uniform: a medical gown that completely covers the outer clothing, or medical pajamas, a cap, a mask, and a change of shoes.

Equipment: notebook, pen, calculator.

State of health: applicants are sick with acute infectious diseases, in the volume including respiratory diseases, are not allowed to attend class.

A student who is late for class can attend it, but if the teacher has put "nb" in the journal, he must complete it in the general order.

*Use of mobile devices:*

Mobile devices may be used by students with the permission of the instructor if they are needed for the assignment.

*Behavior in the audience:*

The behavior of applicants and teachers in the classrooms should be working and calm, strictly comply with the rules established Regulations on academic integrity and ethics of academic relations at Odesa National Medical University, in



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accordanceCode of Academic Ethics and Relations of the Odesa University  
Community National Medical University, Regulation on prevention and detection  
academic plagiarism in the research and educational work of students of higher  
education, scientists and teachers of Odessa National Medical University.