

SYLLABUS OF THE EDUCATIONAL COMPONENT**SOCIAL MEDICINE AND PUBLIC HEALTH**

Specialty: **221 «Dentistry»**

Educational and professional program: **«Dentistry»**

Component code in the educational program: **SC 82**

Level of higher education: **second (master's)**

Form of education: **full-time (full-time)**

Year of study: **5**

Semester(s): **9**

Type of educational component: **selective**

Academic year: **2028-2029**

Volume: **3 credits ECTS (90 hours)**

Classes: **lectures, practical classes, consultations**

Summary control: **credit**

Prerequisites: **Biostatistics and clinical epidemiology**

Department/division: **Department of Public Health and Health Care Management, Nauky Ave., 4, Building A, 3rd floor**

Head of the educational component:

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Educational component page in the KhNMU Distance Learning System (Moodle):
<https://distance.knu.edu.ua/course/view.php?id=6184>

DESCRIPTION OF THE EDUCATIONAL COMPONENT

In the process of studying the academic discipline, higher education students become familiar with the basic concepts and categories of public health, its role and significance in the modern world, study the essence of health and the main determinants that determine it, get acquainted with the essence and significance for public health of demographic processes, morbidity and master the skills for their study and analysis, study approaches and methods for conducting a comprehensive assessment of population health, as well as study and master the features of strategic management in the interests of the health and well-being of the population, the content and features of individual areas of activity in the field of health care, in particular prevention.

COURSE OBJECTIVE: higher education students acquire the necessary knowledge, skills and competencies in research, analysis and assessment of population health indicators, organization, resource provision and activities of the healthcare system, and development of recommendations from the standpoint of evidence-based medicine to prevent and eliminate the harmful effects of factors on health.

LEARNING OUTCOMES:

- Plan and implement measures to prevent dental diseases among the population to prevent the spread of dental diseases.
- Analyze the epidemiological situation and carry out measures of mass and individual, general and local drug and non-drug prevention of dental diseases.
- Analyze and evaluate state, social and medical information using standard approaches and computer information technologies.
- Assess the impact of the environment on the health of the population in a medical institution using standard methods.
- Adhere to a healthy lifestyle, use self-regulation and self-control techniques.

CONTENT OF THE EDUCATIONAL COMPONENT**List of lecture topics (6 hours):**

1. Public health: subject of study and structure of the academic discipline.
2. Fundamentals and significance of medical statistics.
3. Population health. Comprehensive assessment of population health. Risk factors, methods of their study and impact on population health

List of practical training topics (24 hours):

1. Organization, planning and conducting a statistical (epidemiological) study.
Development of a plan and program for a statistical study

2. Relative values, graphic representation of statistical data. Average values, methods of their calculation. Variational series.
3. Analysis of the relationship between the studied parameters of statistical sets (correlation-regression analysis)
4. Methodology for studying and evaluating the main demographic indicators of the natural movement of the population. Analysis of the demographic situation.
5. Methodology for studying and evaluating infant mortality indicators
6. Methodology for studying and evaluating general morbidity indicators.
7. Methodology for studying and evaluating morbidity indicators for the most important socially significant diseases.
8. Methodology for studying and evaluating factors affecting the health of the population.
9. Methodology for studying and evaluating morbidity indicators with temporary loss of working capacity.
10. Medical and social aspects of disability. Methodology for calculating and analyzing disability indicators.
11. Final control.

List of topics for student independent work (60 hours)

1. Public health, functions and services.
3. Theoretical and methodological foundations of medical statistics.
4. Organization, planning and conducting statistical (epidemiological) research.
5. Relative values, methods of their calculation. Graphical representation of statistical data.
6. Characteristics and analysis of statistical data. Average values. Variation indicators.
7. Characteristics of the diversity of the trait. Methodology for assessing the degree of heterogeneity of the trait under study.
8. Analysis of the relationship between the studied parameters of statistical populations (correlation-regression analysis).
9. Standardization method, its application in statistical research.
10. Risk factors and their identification. Methodology for calculating and analyzing risk indicators
10. Medical and social problems of public health of the population and the methodology for studying it.
11. Assessment of the health and well-being of the population
12. Population health: main determinants (risk factors).
13. Medical and social problems of demographic processes.
14. Methodology for studying and assessing the main demographic indicators (Population statics).
15. Methodology for studying and assessing the main demographic indicators of the natural movement of the population (Population dynamics). Analysis of the demographic situation.
16. Methodology for studying and assessing infant mortality indicators.
17. Population morbidity as a medical and social problem.
18. Methodology for studying and assessing morbidity indicators.
19. Methodology for studying and assessing morbidity indicators for the most important socially significant diseases.
20. Methodology for studying and assessing morbidity indicators with temporary loss of working capacity.
21. Medical and social aspects of disability. Methodology for calculating and analyzing disability indicators.
22. Analysis of physical development indicators.
23. Independent study of lecture topics.

IW is aimed at deepening and consolidating theoretical knowledge obtained during classroom training and contributes to the formation of professional competencies. The results of **IW** are subject to control and are included in the final knowledge control.

Consultations: online, with prior registration on the course page in the Distance Learning System.

Teaching methods: lecture, illustration, demonstration, presentation, videos, video films, discussion, business, role-playing, simulation game, modeling of processes and situations, delegation of authority, case method, project method, debate.

EVALUATION

Current educational activity (CEA). Assessment of the success of education seekers is carried out in accordance with the Instructions for assessing the educational activity of higher education seekers at KhNMU (<https://knmu.edu.ua/documents/normatyvni-dokumenty-navchalnogo-proczesu/>). The grade for a practical or final lesson is from 2 to 5 points. Submitting assignments late for unwarranted reasons entails a reduction in the grade according to the percentage of delay in time from the time of completing the assignment. Assignments are checked within 24 hours. Grades are posted in the electronic journal. Unsatisfactory grades are worked out in accordance with the Regulations on the procedure for working out academic classes by KhNMU students (https://knmu.edu.ua/wp-content/uploads/2021/05/polog_vidprac_zaniat.pdf).

At the end of the semester, the semester average grade is converted into a multiple-point grade (70–120 points) in accordance with Table 1 of the Assessment Instructions (see above). The arithmetic average of the CEA for both semesters constitutes the total learning activity (GEA).

Individual tasks (IT) are graded out of 10 points.

The grade for the educational component is given only to higher education applicants who have passed all final classes and the credit. The credit score ranges from 120 to 200 points.

Appealing the results of the final control is carried out in accordance with the procedure established at the KhNMU (https://knmu.edu.ua/wp-content/uploads/2021/05/polog_apel_kontrol.pdf).

EDUCATION COMPONENT POLICIES

Recommendations for course work: actively participate in all forms of work in classes, devote 1-2 hours daily to independent work and preparation for classes, ask questions during classes, attend consultations, submit assignments on time and complete all forms of control.

Attendance at classes. Attendance at lectures and practical classes is mandatory. The dress code for offline classes is a white medical gown. If the student is more than 5 minutes late for a lecture or practical class, he/she may not be admitted to the class. Missed classes are made up in accordance with the Regulations on the procedure for students of KhNMU to complete academic classes (chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://knmu.edu.ua/wp-content/uploads/2021/05/pol_por-vidprac-zaniat.pdf).

Academic integrity. KNMU has a zero tolerance policy towards academic dishonesty. Any violation of the principles of academic integrity entails liability in accordance with the procedure established by KNMU (https://knmu.edu.ua/wp-content/uploads/2021/05/polog_ad-1.pdf).

The use of electronic gadgets and artificial intelligence tools is allowed only with the permission of the teacher.

Policy on individuals with special educational needs. Applicants with special educational needs should contact the teacher to develop an individual educational trajectory.

Teacher response time: 24 hours.

Technical requirements for working on the course:

- access to a computer, laptop, tablet or smartphone
- a corporate Google account with your own photo
- skills in working with Google Workspace (Google Meet, Docs, Sheets, Slides, Forms) and Moodle

Technical support: AMS (ev.shevtsov@knmu.edu.ua), Google (tehotdelknmu@gmail.com), Moodle (al.korol@knmu.edu.ua)

RECOMMENDED SOURCES

1. International Encyclopedia of Public Health / S. R. Quah (ed.). – 2nd ed. – Amsterdam: Elsevier Academic Press, 2024. – 2400 p.
2. Oxford Textbook of Global Public Health, 6 edition. Edited by Roges Detels, Martin Gulliford, Quarraisha Abdool Karim and Chorh Chuan Tan. – Oxford University Press, 2017. – 1728 p.

B Acting Head of the Department of Public
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