# MINISTRY OF HEALTH OF UKRAINE DANYLO HALYTSKY LVIV NATIONAL MEDICAL UNIVERSITY

# **SYLLABUS**

# of the educational discipline «SOCIAL MEDICINE, PUBLIC HEALTH, INCLUDING THE ECONOMICS OF HEALTHCARE» SB 3.4.5

# INDIVIDUAL PROFILE COURSE: ORTHOPEDIC DENTISTRY

training of specialists of the second (masters) level of higher education branch of knowledge 22 «Health care» specialty 221 «Dentistry»



1. General information			
Name of the faculty	foreign students		
Educational program	22 "Health care"; 221 "Dentistry", full-time		
Academic year	2023-2024		
Name of discipline, code	«Social medicine, public health, including the economics		
	healthcare» SB 3.4.5		
	https://new.meduniv.lviv.ua/kafedry/kafedra-sotsialnoyi-		
	medytsyny-ekonomiky-ta-organizatsiyi-ohorony-zdorov-ya/		
Department	Department of social medicine, economics and organization of		
	health care		
	Address: 12, Zelena str.		
	tel. +38 032 276-81-67		
	e-mail: kaf_socmed@meduniv.lviv.ua		
Head of the department	Associate professor Taras Gutor		
	taras_gutor@ukr.net		
Year of study	5 <sup>rd</sup> year of study		
Term	9 or 10-th terms		
Type of discipline / module	Elective		
Teachers	Gutor Taras, Associate Professor taras_gutor@ukr.net		
	Mysak Zoryana, Assistant zoryana.mysak@ukr.net		
	Oksana Kovalska, Associate Professor oksanaromkov@ukr.net		
Erasmus	No		
The person responsible for the	Nazar Negrych, Assistant		
syllabus	nazarnegrych@gmail.com		
Number of ECTS credits	3 credits		
Number of academic hours	90 hours (42 hours of practical classes, 48 hours of self-guided		
	study of students)		
Language of study	English, Ukrainian		
Information on consultations	Ons Consultations - according to the schedule for the course once a		
	week from 3.30 p.m. till 5.00 p.m.		
Address, telephone and	Clinical base is not provided		
regulations of the clinical base,			
office			
V	I		

#### 2. Short annotation to the course

Discipline «Social medicine, public health, including the economics of healthcare» provides mastering of:

- *health care organization* the activity of system to provide preservation, strengthening and restoration of health of various public groups, particularly organization of dental care;
- the basics of economic knowledge in the health care system, necessary to assess the economic feasibility of public health decision-making.

## 3. The purpose and objectives of the discipline

1. The purpose: to master necessary knowledge and skills and gain competence in terms of examining, analysis and evaluation of public health indexes, organization, resource supply and functioning of the health care system, recommendations on preventing and elimination of harmful effect of factors and improvement of organization of medical care to the public, particularly dental care.

#### 2. The main tasks:

- mastering the basics of the organization of medical care, the principles of assessing the organization and quality of dental care to the population, including during emergencies (pandemics, martial law);
- mastering the principles of developing measures to preserve and strengthen the health of the population and its individual contingents;
- mastering the theoretical foundations, modern principles, patterns, economic principles and strategic directions of public health;

- formation of practical skills in the use of methods of planning, organizing and evaluating the activities of health care institutions and individual practitioners;
- mastering the basics of financial management in health care, studying indicators of financial stability and efficiency of use of funds.
- **3. Competences** and results of studying, forming of which the discipline facilitates: **General competences (GC):**
- GC-1 Ability to abstract thinking, analysis and synthesis.
- GC-2 Knowledge and understanding of the subject area and understanding of professional activity.
- GC-3 Ability to apply knowledge in practice.
- GC-4 Ability to communicate in the state language orally and in writing
- GC-5 Ability to communicate in English
- GC-6 Skills in the use of information and communication technologies.
- GC-7 Ability to search, process and analyze information from various sources.
- GC-8 Ability to adapt and act in a new situation.
- GC-9 Ability to identify, pose and solve problems.
- GC-10 Ability to be critical and self-critical.
- GC-11 Ability to work in a team.
- GC-12 The desire to preserve the environment.
- GC-13 Ability to act socially responsibly and consciously.
- GC-14 Ability to exercise their rights and responsibilities as a member of society, to realize the values of civil (free democratic) society and the need for its sustainable development, the rule of law, human and civil rights and freedoms in Ukraine.
- GC-15 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, technology and technology, use different types and forms of physical activity for active recreation and a healthy lifestyle.

# Special (professional, objective) competences (PC):

- PC-1 Ability to collect medical information about the patient and analyze clinical data.
- PC-2 Ability to interpret the results of laboratory and instrumental research.
- PC-4 Ability to plan and implement measures for the prevention of diseases of organs and tissues of the oral cavity and maxillofacial area.
- PC-5 Ability to design the process of providing medical care: to determine approaches, plan, types and principles of treatment of diseases of organs and tissues of the oral cavity and maxillofacial area.
- PC-10 Ability to organize and conduct medical and evacuation measures.
- PC-12 Ability to organize and conduct screening examinations in dentistry.
- PC-13 Ability to assess the impact of the environment on the health of the population (individual, family, population).
- PC-14 Ability to maintain regulatory medical records.
- PC-15 Processing of state, social and medical information.
- PC-16 Ability to organize and conduct rehabilitation activities and care for patients with diseases of the oral cavity and maxillofacial area.
- PC-17 Ability to legally support one's own professional activity.
  - **Program learning outcomes (PLO),** the formation of which is facilitated by the discipline:
- PLO-6 Plan and implement measures to prevent dental diseases among the population to prevent the spread of dental diseases.
- PLO-7 Analyze the epidemiological situation and carry out measures of mass and individual, general and local drug and non-drug prevention of dental diseases.
- PLO-12 Organize medical and evacuation measures among the population, servicemen, in emergency situations, including martial law, during the detailed stages of medical evacuation, taking into account the existing system of medical and evacuation support.

- PLO-14 Analyze and evaluate government, social and medical information using standard approaches and computer information technology.
- PLO-15 Assess the impact of the environment on the health of the population in a medical institution by standard methods.
- PLO-16 Form goals and determine the structure of personal activities based on the results of the analysis of certain social and personal needs.
- PLO-17 Adhere to a healthy lifestyle, use the techniques of self-regulation and self-control.
- PLO-18 To be aware of and guided in their activities by civil rights, freedoms and responsibilities, to raise the general cultural level.
- PLO-19 Adhere to the requirements of ethics, bioethics and deontology in their professional activities
- PLO-20 Organize the necessary level of individual safety (own and persons cared for) in case of typical dangerous situations in the individual field of activity.

#### 4. Prerequisites of the discipline

«Social medicine, public health, including the economics of healthcare» as a discipline:

- based on studying the following disciplines by the students: history of medicine, informatics, ethics, hygiene and ecology, epidemiology, sociology and medical sociology, basics of economic theories;
- lays the ground for studying organization of diagnostic and therapeutical process, as well as evaluation of its amount and quality during the studying of clinical disciplines;
  - provides studying of legal and organizational basics in health care industry;
- encourages forming of preventive direction of practice of the future doctors, considering possible influence of factors of different etiology on the state of public health, as well as evaluation of risk during the development of complex medico-social measures in interaction with the system of public health;
- contributes to the formation of economic worldview and basic competency characteristics for the methodology of economic analysis of medical institutions in modern conditions.

5. Program learning outcomes					
	List of learning outcomes				
Learning outcome code	Content of learning outcomes	Reference to the competency matrix cod			
Knowledge -1	Knowledge of principles and methods of promotion of dental health. Knowledge of the state patient health (population health) and principles of prevention	PR-6, PR-7			
Knowledge -1	Knowledge of methods of screening programs in dentistry	PR-6, PR-7			
Knowledge -2	Knowledge of socio-economic and biological determinants that affect the population health	PR-15			
Knowledge -2	Knowledge of the main sources of information	PR-14			
Knowledge -2	Knowledge of governing regulations of business activities in health care system	PR-14, PR-18, PR-19, PR-20			
Skills -2	Be able to assess the condition patient health (population health). Be able to organize promotion of dental health, primary prevention dental diseases among people	PR-6, PR-14			
Skills -2	Be able to analyze the results of screening research and develop measures to reduce the prevalence of detected dental disease	PR-7, PR-14			
Skills -2	Be able to assess the connection and impact socio-economic and biological factors on individual, family, population health.	PR-12, PR-15, PR-17			
Skills -1	Be able to integrate the processed information into own professional activity	PR-14, PR-16, PR-18			
Skills -1	Be able to exercise their rights and protect legitimate interests, as well as analyze specific situations that arise in the process of medical practice	PR-14, PR-18, PR-19			
Communication -1	On the basis of results condition analysis population health,	PR-7, PR-14			

		prepare inform	nation regarding strengthening health		
Communicat Communicat		-1, Ability to organize and conduct screening research to diagnose dental			PR-6, PR-14
Communica	tion -1	Ability to for	PR-15, PR-17		
Communicat Communicat			economic and biological factors on public health  Ability get information from relevant sources and process it		
Communicat		Ability apply	legal norms in the process of professional activit	У	PR-14, PR-18, PR-19
Autonomy responsibil		assessment h	ibility for timely and quality conduct measures fealth contingents' population, activities of rehealth, advocacy dental health, primary preventi	covery and	PR-6
Autonomy responsibili Autonomy responsibil	ity -1, and	Responsibility for timeliness and validity decisions made based on the results of screening studies			PR-6, PR-14
Autonomy responsibili Autonomy responsibil	and ity -1, and	Responsibility for validity health risk assessments people			PR-12, PR-15
Autonomy responsibil	and	Responsibility professional ac	for validity decisions on integration of informaticivity	on into own	PR-14
Autonomy and Responsibilit			y for validity decisions in the process of organizing and edical practice		PR-14, PR-18, PR-19
•	6. Form and scope of discipline				
Course form	nat		full-time		
Typ	es of tr	aining	Number of hours	Numb	er of groups
Lectures			0		<u>-</u>
Practical lessons 42		1			
Seminars	1 0	1 1	0		1
Individual	work of		Topics and content of the discipline		1
Code of occupation type	,	Горіс	Content of learning	Code of learning outcome	Teacher
Practical lesson - 1	organization of outpatient dental care. Features of dental care during emergencies (pandemics,		Legislation and regulations governing the activities of the dental service. Principles of organization of outpatient and inpatient dental care. The structure and staffing of the dental clinic as a whole and its structural units. Accounting and reporting documentation in the activities of a dentist. Dental care for adults and children within the Medical Guarantee Program	PR-6 PR-7 PR-12 PR-15 PR-19	according to the schedule of groups
Practical lesson - 2	Organization of inpatient dental care. Features of dental care during emergencies (pandemics, martial law)		Requirements for the organization of anti- epidemic measures in the provision of dental care during quarantine. Additional security measures for visitors and employees of dental institutions in martial law	PR-12 PR-15 PR-19 PR-20	according to the schedule of groups
Practical lesson - 3	Economic principles of functioning of the public health system. Organization of business activities in health care		Levels of economic relations in public health system. Resource provision of the health care system. Methodological tools for the research of economic relations in health care system. The essence of business activities and its features in health care system. Legal principles of business activities in health care. Stages of medical institution registration. Licensing of medical practice. Requirements for medical entities conducting medical practice. Accreditation of health care institutions.	PR-15 PR-16 PR-17 PR-19 PR-20	according to the schedule of groups

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Practical lesson - 4	Basics of financial management in the health care	Content and tasks of financial management in health care. Methods of financial planning of medical institutions. Classification of costs: fixed, variable, average, overhead, alternative, marginal. Forms of salary of medical workers	PR-14 PR-16	according to the schedule of groups
Practical lesson - 5	Marketing technologies as an instrument for the implementation of dental health promotion	The main tasks of marketing communications in health care. Non-profit marketing in healthcare. Marketing functions in medical services market. External and internal marketing of private medical institutions	PR-6 PR-7 PR-16	according to the schedule of groups
Practical lesson - 6	Analysis of economic efficiency of dental institutions	The concept of term «efficiency». The main indicators of activity of dental institutions. Estimation of profitability of activity. Search for reserves to increase efficiency	PR-14 PR-16	according to the schedule of groups
Practical lesson - 7	Insurance medicine as a model of realization of public health	Contents of medical insurance. Rights and obligations of medical insurance entities. Types of medical insurance: compulsory and voluntary and features of their organization. Methods of determining the insurance rate. Insurance policy. Organization of quality control of medical services in the conditions of insurance medicine.	PR-15	according to the schedule of groups
Individual work of students - 1	Organizational and legal forms of business activity, their comparative characteristics. Basic information of two-level architecture of the e-Health system (ESHC) of Ukraine	Healthcare enterprises. Personal (individual) medical enterprise. Classification of companies: limited liability companies, supplemental liability companies, full companies, commanded companies. Types of health care associations: associations, corporations, consortia, concerns, holdings	PR-14 PR-18	according to the schedule of groups
Individual work of students-2	Methods of making a business plan in the organization of business activities in the health care. Central database of the ESHC	Business plan as a tool for regulating business activities. Business plan functions. The structure of the business plan. Basic requirements and rules for making a business plan	PR-14 PR-16 PR-17	according to the schedule of groups
Individual work of students-3	Characteristics of the main methods of financing medical care.  Medical information systems as an ingredient of the ESHC	The main sources of financing health care system. Basic principles of budget financing. Classification of taxes. Advantages and disadvantages of the insurance system. Private model of financing.	PR-14 PR-16	according to the schedule of groups
Individual work of students-4	Specifics of price formation in the health care	Types of prices in health care. Features of price formation and regulation in health care, dentistry. Pricing policy in health care system. The structure of the price of medical services and analysis of its elements. Making a pricing strategy for a medical institution	PR-14 PR-16	according to the schedule of groups
Individual work of students-5	Organization of marketing activities in the market of medical goods and services	Stages of marketing process. Analysis of market opportunities, research of marketing environment of medical organization. Market segmentation. 4P conception. Directions of marketing strategy for medical institutions	PR-14 PR-16	according to the schedule of groups
Individual work of students-6	Socio-ethical marketing in the health care. Medical and other	The essence of term "socio-ethical marketing" and the purpose of its application. Principles of socially-oriented marketing. Features of the organization of marketing with a social	PR-14 PR-18	according to the schedule of groups

	information systems as the instruments of automation and control at health care providers	orientation		
Individual work of students-7	Basics of economic analysis in the health care. Automated directories of the central database of the e-Health system	Content and main tasks of economic analysis in health care. Classification of economic analysis by organization, time and methods. Financial analysis. Indicators of financial stability of a medical institution	PR-14 PR-16	according to the schedule of groups
Individual work of students-8	Methods of pharmacoeconomic analysis in the introduction of alternative medical technologies	The purpose of pharmacoeconomic analysis. System method "cost-effectiveness". The essence of the method "cost-benefit". Evaluation of efficiency based on the method of "cost-effectiveness". Determining the structure of the use of funds on the basis of the method "cost of illness"	PR-14 PR-16	according to the schedule of groups
Individual work of students-9	The current state of the medical insurance market in Ukraine. Central database registers of the ESHC	Analysis of the medical insurance market in Ukraine. Indicators of activity of health insurance companies. Corporate medical insurance. Prospects for the development of the voluntary medical insurance market in Ukraine	PR-14 PR-15	according to the schedule of groups
Individual work of students-10	Problems and prospects for the introduction of compulsory medical insurance in Ukraine	Analysis of the legal framework for the introduction of compulsory medical insurance in Ukraine. Tax policy and state supervision in medical insurance. Financial reliability of insurers. Insurance culture of the population	PR-14 PR-15	according to the schedule of groups

## 8. Verification of learning outcomes

## **Current control**

is carried out during lessons and aims to test students' mastery of educational material. Forms of assessment of current educational activities include control of theoretical and practical training. The final grade for the current educational activity is set on a 4-point (national) scale

Learning outcom		Method of verifying	Enrollment criteria	
code	to borrow	learning outcomes		
AR-1, AR-2	P-1-7	Checking the written task of self- preparation for practical class	passed / not passed	
AR-1, AR-2,	IWS-1-10	Checking the written task of individual work	passed / not passed	
Kn-1, Kn-2, S-1, S-2, C-1, C-2	P-1-7, IWS- 1-10	Oral answers in practical lesson by the topic of practical training and individual work	«2» - <60% correct answers; «3» - 60-69%, «4» - 70-89 %, «5» - 90-100%.	
Kn-1, Kn-2, S-1, S-2, C-1, C-2	P-1-7, IWS- 1-10	Test control in a practical lesson	«2» - <70% correct answers; «3» - 70-79%, «4» - 80-89 %, «5» - 90-100%.	
Kn-1, Kn-2, S-1, S-2, C-1, C-2	P-1-7, IWS- 1-10	Demonstration of practical skills of calculation of indicators	«2» - <60% correct answers; «3» - 60-69%, «4» - 70-89 %, «5» - 90-100%.	
Kn-1, Kn-2, S-1, S-2, C-1, C-2	P-1-7, IWS- 1-10	Demonstration of practical skills to evaluate and analyze the result of research	«2» - <60% correct answers; «3» - 60-69%, «4» - 70-89 %, «5» - 90-100%.	
Final control of studying				
General evaluation system  Academic performance during the semester - 100% on a 200-point scale				

Rating scales	Fraditional 4-point scale, multi-point (200-point) scale, ECTS rating scale		
Conditions of	The student attended all practical (laboratory, seminar) alas	sas and received at least	
admission to the	The student attended all practical (laboratory, seminar) classes and received at least 20 points for classroom academic performance		
final control			
Type of final contr	ol Methods of final control	Enrollment criteria	
Credit	Students have to pass all topics by the thematic schedule.	The maximum number of	
	Grades by the 4-point scale are converted into points on a	points is 200.	

**The maximum number of points** that a student can score for the current academic performance to pass a credit is 200 points.

the results of student academic performance"

multi-point (200-point) scale in accordance with the

Regulation "Criteria, rules and procedures for evaluating

The minimum number of

points is 120

**The minimum number of points** that a student has to score for the current academic performance to receive credit is 120 points.

The calculation of the number of points is based on the grades received by the student by a 4-point (national) scale during the course of the discipline, by calculating the arithmetic mean (AM), rounded to two decimal places. The resulting value is converted into points on a multi-point scale as follows:

$$x = \frac{AM \times 200}{5}$$

# 9. Course policy

During the course, teachers promote a policy of academic integrity.

#### 10. Literature

#### Basic:

- 1. Public health: study guide / by general ed. Gruzeva T.S. Plus book, 2021. 296 p.
- 2. Public Health Ethics: Global Cases, Practice, and Context: textbook / Ortmann L.W., Barrett D.H., Saenz C., Bernheim R.G., Dawson A., Valentine J.A., Reis A. Springer. 2016. Chapter 1.
- 3. Workshop for preparation for practical classes in the academic discipline «Social medicine, public health». Lviv. 2020 **Additional:**
- 1. Public health: textbook for students. higher med. education of institutions / V. F. Moskalenko, O. P. Gulchii, T. S. Gruzheva and others. Ed. 3.- Vinnytsia: Nova kniga, 2013. 560 p.
- 2. Feskov V.V. Basics of management and marketing in dentistry: textbook. Medicine, 2015. 192 p.
- 3. Fundamentals of economic knowledge: a basic textbook for students. higher education institutions / A. Pavlenko, V. Savchuk, Yu. Zaitsev. Kharkiv: Folio, 2014. 768 p.
- 4. Economic analysis of the use of resources in the health care system: training. manual / Edited by V. D. Paria / Zhytomyr: Polissya, 2015. 148 p.
- 5.On approval of the Concept of public health system development. Order of the Cabinet of Ministers of Ukraine of November 30, 2016 № 1002-r. Electronic resource: https://zakon.rada.gov.ua/laws/show/1002-2016-%D1%80#Text
- 6. On approval of the License Conditions for conducting business activities in medical practice. Resolution of the Cabinet of Ministers of Ukraine of March 2, 2016 № 285. Electronic resource: https://zakon.rada.gov.ua/laws/show/285-2016-%D0%BF
- 7. About the state financial guarantees of medical service of the population. Law of Ukraine № 2168-VIII of 2018. Electronic resource: https://zakon.rada.gov.ua/laws/show/2168-19
- 8. Some issues of implementation of the program of state guarantees of medical care in 2022. Resolution of the Cabinet of Ministers of Ukraine of December 29, 2021 № 1440. Electronic resource: https://zakon.rada.gov.ua/laws/show/1440-2021-%D0%BF#Text
- 9.About insurance. Law of Ukraine № 85/96-BP of 1996. Electronic resource: https://zakon.rada.gov.ua/laws/show/85/96-%D0%B2%D1%80

# 11. Equipment, logistics and software of the discipline / course

- Curriculum, thematic schedules of lectures, seminars and independent extracurricular activities;
- Educational and methodical recommendations on the topic of the lesson (theoretical presentation of the topic of the lesson, control questions, situational tasks for independent work and a list of recommended references)
- Textbooks and manuals from the library
- Computer and multimedia projector

#### 12. Additional information

All the necessary information for the educational process – thematic schedules of classes and extra classes, lecture materials, guidelines for practical classes, independent work of students, test control of knowledge is available in Misa: http://misa.meduniv.lviv.ua/course/view.php?id=1213

Syllabus compiler

Assistant, PhD Negrych N. O.

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Assoc. Prof., PhD Gutor T. H.