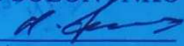


DANYLO HALYTSKY LVIV NATIONAL MEDICAL UNIVERSITY  
Department of Social Medicine, Economics and Organization of Health Care

"APPROVED BY"

First Vice-Rector of Scientific and Pedagogical Work  
of Danylo Halytsky Lviv National Medical University  
Associate Professor SOLONYNKO I.I.

  
"31" 07 2023

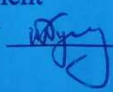
## PROGRAM OF EDUCATIONAL DISCIPLINE

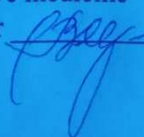
«SOCIAL MEDICINE, PUBLIC HEALTH, INCLUDING THE ECONOMICS  
OF HEALTHCARE»  
SB 3.4.5

### INDIVIDUAL PROFILE COURSE: ORTHOPEDIC DENTISTRY

preparation of the second (master`s) level of higher education,  
branch of knowledge 22 "Health care",  
specialty 221 "Dentistry"



Discussed and approved  
at the methodical meeting of the department  
of Social medicine, economics and  
organization of Health care  
Danylo Halytsky LNMU  
(minute No 8 dated 13 June 2023)  
Head of the department  
Associate Professor  T. G. GUTOR

Approved by  
the Specialized methodical commission  
of Preventive medicine  
Danylo Halytsky LNMU  
(minute No 4 dated 15 June 2023)  
Head of methodical commission of  
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## INTRODUCTION

The program of study of the discipline "Social medicine, public health, including the economics of healthcare" is made in accordance with the Educational and professional program "Dentistry" Standard of higher education of the *second (master's) level* field of knowledge 22 "Health" specialty 221 "Dentistry"

### DESCRIPTION OF THE DISCIPLINE (ABSTRACT)

The discipline "Social medicine, public health, including the economics of healthcare" involves mastering:

- *health care organizations*, i.e. the activities of the system to ensure the preservation, strengthening and restoration of public health, including health care organizations and public health systems;
- *the basics of economic knowledge in the medical field* necessary to assess the economic feasibility of public health decision-making.

Discipline structure	Number of hours, of them				Year of studying	Control type
	Total number of hours / ECTS credits	auditorium		IWS		
		lectures	practical lessons			
"Social medicine, public health, including the economics of healthcare"	90 hours / 3,0 credits	-	42	48	5rd (IX / X semester)	credit

**Object of studying of the discipline** are legal bases and strategic directions of public health development, health care system, its organization and economic relations in the medical sphere.

#### *Interdisciplinary connections:*

"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.

### 1. THE PURPOSE AND TASKS OF THE DISCIPLINE

**1.1 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.

**1.2 The main tasks** of the discipline "Social medicine, public health, including the economics of healthcare" are:

- 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 funds.

### 1.3 Competences and results of studying, forming of which the discipline facilitates.

According to the requirements of the Standard, discipline provides students with mastering of such *competences*:

#### • *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.

#### • *Digital competences*

Specification of competences according to the descriptors of NFQ

#### Matrix of competences

No	Competence	Knowledge	Skill	Communication	Autonomy and responsibility
		Knowledge 1 –Specialized	Skill 1– Solving	Communication 1 –Clear and	Autonomy and

		conceptual knowledge acquired during of the process of learning and / or professional activity at the level of the latest achievements, which are the basis for original thinking and innovation, in particular in the context of research work	complex problems and issues that require updating and integrating knowledge, often in conditions of incomplete / insufficient information and conflicting requirements	unambiguous communication of own conclusions, as well as knowledge and explanations that substantiate them, to specialists and non-specialists, in particular to students	<b>responsibility 1</b> –Decision making in difficult and unpredictable conditions, which requires the application of new approaches and forecasting
		<b>Knowledge 2</b> –Critical understanding of problems in teaching and / or professional activities and at the border of subject areas	<b>Skill 2</b> – Conducting research and / or innovation activities	<b>Communication 2</b> – Use of foreign languages in professional activities	<b>Autonomy and responsibility 2</b> – Responsibility for the development of professional knowledge and practices, assessment of strategic team development
1	Ability to collect medical information about the patient and analyze clinical data.	<b>K2</b>	<b>S1</b>	<b>C1, C2</b>	
2	Ability to interpret the results of laboratory and instrumental research.	<b>K1</b>	<b>S1</b>		<b>AR1</b>
3	Ability to plan and implement measures for the prevention of diseases of organs and tissues of the oral cavity and maxillofacial area.	<b>K2</b>	<b>S1</b>	<b>C1</b>	<b>AR1</b>
4	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.	<b>K1</b>	<b>S1</b>		<b>AR1</b>
5	Ability to organize and conduct medical and evacuation measures.	<b>K1, K2</b>	<b>S1</b>	<b>C1</b>	<b>AR1, AR2</b>
6	Ability to organize and conduct screening examinations in dentistry.	<b>K1</b>	<b>S2</b>	<b>C1</b>	<b>AR2</b>
7	Ability to assess the impact of the environment on the health of the population (individual, family, population).	<b>K2</b>	<b>S2</b>		
8	Ability to maintain regulatory medical records.			<b>C1</b>	<b>AR1</b>
9	Processing of state, social and medical information.	<b>K2</b>		<b>C1, C2</b>	<b>AR1, AR2</b>
10	Ability to organize and conduct rehabilitation activities and care for patients with diseases of the oral cavity and maxillofacial area.	<b>K1</b>	<b>S1</b>	<b>C1</b>	

11	Ability to legally support one's own professional activity.	K1		C1	AR2
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### **Results of studying:**

**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.

## **2. INFORMATION VOLUME OF THE DISCIPLINE**

3 ECTS credits / 90 hours are allocated for the study of the discipline.

### **Topic 1. Organization of outpatient dental care. Features of dental care during emergencies (pandemics, martial law)**

Legislation and regulations governing the activities of the dental service. Principles of organization of outpatient 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.

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.

### **Topic 2. Organization of inpatient dental care. Features of dental care during emergencies (pandemics, martial law)**

Legislation and regulations governing the activities of the dental service. Principles of organization 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.

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.

### **Topic 3. Economic principles of public health. Organization of business activities in health care**

Levels of study of economic relations in the field of public health. Resource provision of the health care system. Methodological tools for the study of economic relations in the medical field. Health as an economic category. Factors that affect health. Economic losses from loss of health. Costs of preventive measures.

The essence of entrepreneurship and its features in health care. Legal principles of business in health care. Stages of registration of a medical institution. Licensing of medical practice. Requirements for medical entities conducting medical practice. Accreditation of health care facilities.

### **Topic 4. 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 Entrepreneurs. Sole proprietorship. Classification of companies: limited liability companies, additional liability companies, joint stock companies, general partnerships, limited partnerships. Types of health care associations: associations, corporations, consortia, concerns, holdings.

**Topic 5. 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 drawing up a business plan.

**Topic 6. 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 medical institution costs: fixed, variable, average, overhead, alternative, marginal. Forms of remuneration of medical workers.

**Topic 7. Characteristics of the main methods of financing medical care. Medical information systems as an ingredient of the ESHC**

The main sources of funding for health care. Basic principles of budget financing. Classification of taxes. Advantages and disadvantages of the health insurance system. Private model of financing the medical industry.

**Topic 8. Specifics of price formation in the health care**

Types of prices in the field of health care. Features of price formation and regulation in the field of health care, dentistry. Pricing policy in the health care system. The structure of the price of medical services and analysis of its elements. Development of the pricing strategy of the medical institution.

**Topic 9. 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. Functions of marketing in the market of medical services. External and internal marketing of private sector medical institutions.

**Topic 10. Organization of marketing activities in the market of medical goods and services**

Stages of marketing research. Analysis of market opportunities, study of the marketing environment of the medical organization. Market segmentation. 4P concept. Directions of marketing strategy for medical institutions.

**Topic 11. Socio-ethical marketing in the health care. Medical and other information systems as the instruments of automation and control at health care providers**

The essence of the concept of "socio-ethical marketing" and the purpose of its application. Principles of socially-oriented marketing. Features of the organization of marketing events with a social focus.

**Topic 12. Analysis of economic efficiency of dental institutions**

The meaning of the concept of "efficiency". The main indicators of the effectiveness of dental institutions. Estimation of profitability of activity. Search for reserves to increase efficiency.

**Topic 13. 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 the medical institution.

**Topic 14. 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 of "cost-benefit". Evaluation of efficiency based on the method of "cost-benefit". Determining the structure of the use of funds based on the method of "cost of the disease".

**Topic 15. The current state of the medical insurance market in Ukraine. Central database registers of the ESHC**

Analysis of the health insurance market in Ukraine. Performance indicators of health insurance companies. Corporate health insurance. Prospects for the development of the voluntary health insurance market in Ukraine.

**Topic 16. Problems and prospects for the introduction of compulsory health insurance in Ukraine**

Analysis of the legal framework for the introduction of compulsory health insurance in Ukraine. Tax

policy and state supervision in the field of health insurance. Financial reliability of insurers. Insurance culture of the population.

**Topic 17. Insurance medicine as a model of realization of public health.**

Contents of health insurance. Rights and responsibilities of health insurance entities. Types of health insurance: compulsory and voluntary and the peculiarities of their organization. Methods of determining the insurance rate. Insurance policy. Organization of quality control of medical services in terms of insurance medicine.

**3. STRUCTURE OF THE EDUCATIONAL DISCIPLINE**

No	Name of the topic	Lectures	Practical lessons	Independent work	Individual tasks
1.	Organization of outpatient dental care. Features of dental care during emergencies (pandemics, martial law)	-	6	-	-
2.	Organization of inpatient dental care. Features of dental care during emergencies (pandemics, martial law)	-	6	-	-
3.	Economic principles of functioning of the public health system. Organization of business activities in health care	-	6	-	-
4.	Organizational and legal forms of business activity, their comparative characteristics. Basic information of two-level architecture of the e-Health system (ESHC) of Ukraine	-	-	5	-
5.	Methods of making a business plan in the organization of business activities in the health care. Central database of the ESHC	-	-	5	-
6.	Basics of financial management in the health care	-	6	-	-
7.	Characteristics of the main methods of financing medical care. Medical information systems as an ingredient of the ESHC	-	-	5	-
8.	Specifics of price formation in the health care	-	-	5	-
9.	Marketing technologies as an instrument for the implementation of dental health promotion	-	6	-	-
10.	Organization of marketing activities in the market of medical goods and services	-	-	5	-
11.	Socio-ethical marketing in the health care. Medical and other information systems as the instruments of automation and control at health care providers	-	-	5	-
12.	Analysis of economic efficiency of dental institutions	-	6	-	-
13.	Basics of economic analysis in the health care. Automated directories of the central database of the e-Health system	-	-	5	-
14.	Methods of pharmacoeconomic analysis in the introduction of alternative medical technologies	-	-	5	-
15.	The current state of the medical insurance market in Ukraine. Central database registers of the ESHC	-	-	4	-
16.	Problems and prospects for the introduction of compulsory medical insurance in Ukraine	-	-	4	-
17.	Insurance medicine as a model of realization of public health. Credit	-	6	-	-
<b>Total number of hours 90 / ECTS credits – 3.0</b>		<b>0</b>	<b>42</b>	<b>48</b>	<b>0</b>
<b>Final control</b>		<b>Credit</b>			

**4. THEMATIC PLAN OF LECTURES – not provided**



## 5. THE THEMATIC PLAN OF PRACTICAL LESSONS

No	Name of the topic	Number of hours
1.	Organization of outpatient dental care. Features of dental care during emergencies (pandemics, martial law)	6
2.	Organization of inpatient dental care. Features of dental care during emergencies (pandemics, martial law)	6
3.	Economic principles of functioning of the public health system. Organization of business activities in health care	6
4.	Basics of financial management in the health care	6
5.	Marketing technologies as an instrument for the implementation of dental health promotion	6
6.	Analysis of economic efficiency of dental institutions	6
7.	Insurance medicine as a model of realization of public health	6
<b>Total number of hours</b>		<b>42</b>

## 6. THE THEMATIC PLAN OF THE INDEPENDENT WORK OF STUDENTS

No	Name of the topic	Number of hours	Type of control
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	5	Current control on the practical lessons
2.	Methods of making a business plan in the organization of business activities in the health care. Central database of the ESHC	5	Current control on the practical lessons
3.	Characteristics of the main methods of financing medical care. Medical information systems as an ingredient of the ESHC	5	Current control on the practical lessons
4.	Specifics of price formation in the health care	5	Current control on the practical lessons
5.	Organization of marketing activities in the market of medical goods and services	5	Current control on the practical lessons
6.	Socio-ethical marketing in the health care. Medical and other information systems as the instruments of automation and control at health care providers	5	Current control on the practical lessons
7.	Basics of economic analysis in the health care. Automated directories of the central database of the e-Health system	5	Current control on the practical lessons
8.	Methods of pharmacoeconomic analysis in the introduction of alternative medical technologies	5	Current control on the practical lessons
9.	The current state of the medical insurance market in Ukraine. Central database registers of the ESHC	4	Current control on the practical lessons
10.	Problems and prospects for the introduction of compulsory medical insurance in Ukraine	4	Current control on the practical lessons
<b>Total number of hours</b>		<b>48</b>	

**7. INDIVIDUAL TASKS** are not planned in the working curriculum for the academic year.

### 8. METHODS OF STUDYING:

1. verbal methods: a lecture, a talk, a story, an explanation, a work with literature;
2. illustrative methods: an illustration, a demonstration, an observation;
3. practical methods: situational tasks, independent work, research work;
4. interactive methods: a discussion, a work in small groups, brain storm, case-method, business game.

### 9. METHODS OF CONTROL

Types of control - current and final.

The form of final control in accordance with the curriculum - credit.

The set of knowledge, skills, abilities and other competencies acquired by the applicant in higher education in the process of learning on each topic of the discipline is roughly assessed by the following criteria:

- 5 /«excellent» - student masters theoretical material of the topic flawlessly, demonstrates deep and comprehensive knowledge of the appropriate topic, main provisions of the scientific sources and recommended literature, thinks and answers logically, uses the acquired theoretical knowledge during the practical material analysis fluently, expresses own stance on certain problems, demonstrates a high level of mastering of practical abilities;

- 4 /«good» - student masters theoretical material of the topic good, has a grasp in the main aspects from the scientific sources and recommended literature, formulates them reasonably, has a grasp in practical abilities, expresses own reasoning on certain problems, but makes errors and inaccuracies in the reasoning of theoretical content and performing the practical abilities;

- 3 /«satisfactory» - student masters the main aspects of theoretical material of the topic, familiarized with the scientific sources and recommended literature, but answers unconvincingly, confuses the concepts, additional questions cause diffidence and absence of stable knowledge in student; answering the practical-type questions student expresses inaccuracies in knowledge, cannot evaluate facts and phenomena, link them with the future practice, makes errors performing the practical abilities;

- 2 /«unsatisfactory» - student does not master the studying material of the topic, does not know the scientific facts and definitions, hardly familiarized with scientific sources and recommended literature, does not demonstrate scientific thinking, practical abilities are not formed.

## 10. CURRENT CONTROL

**Current control** is carried out at each practical lesson in accordance with the specific objectives of the topic, as well as during the individual work of the teacher with the student for those topics that the student develops independently and they are not part of the practical lesson. Objective / standardized control of students' theoretical and practical training is used to assess current learning activities.

**10.1 Evaluation of current educational activities.** During the assessment of mastering each topic for the current educational activity of the student, grades are set on a 4-point (national) scale, taking into account the approved criteria for assessing the discipline. This takes into account all types of work provided by the program of the discipline. The student must receive a grade from each topic for further conversion of grades into points on a multi-point (200-point) scale.

## 11. FORM OF FINAL CONTROL OF LEARNING SUCCESS

The form of final control is credit.

**Final control** (credit) is carried out at the end of the study at the last practical lesson. Students who have completed all types of work provided for in the curriculum and scored at least the minimum number of points in the discipline are admitted to the final control.

The grade in the discipline is based on the results of current educational activities and is expressed on a two-point scale "credited" or "not credited". To enroll, a student must receive for the current academic activity a score of at least 60% of the maximum number of points in the discipline (120 points).

## 12. SCHEME OF ACCOUNTING AND DISTRIBUTION OF SCORES, OBTAINED BY THE STUDENTS:

**Maximal number of points** which student can acquire for the current studying activity of learning the discipline is 200.

**Minimal number of points** which student should acquire for the current studying activity for discipline is 120.

**Calculation of number of points** is conducted on the basis of obtained points by the student in traditional scale for learning the discipline during semester, by calculating the arithmetic mean (AM), rounded to the second number after coma. Acquired value is converted into the points in multiscore scale as follows:

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

As a matter of convenience here is given a table for conversion into 200-point scale:

**Conversion of an average grade for current studying activity into multiscore scale for disciplines, which are finished with credit**

4-point scale	200-point scale	4-point scale	200-point scale	4-point scale	200-point scale	4-point scale	200-point scale
5	200	4.45	178	3.92	157	3.37	135
4.97	199	4.42	177	3.89	156	3.35	134
4.95	198	4.4	176	3.87	155	3.32	133
4.92	197	4.37	175	3.84	154	3.3	132
4.9	196	4.35	174	3.82	153	3.27	131
4.87	195	4.32	173	3.79	152	3.25	130
4.85	194	4.3	172	3.77	151	3.22	129
4.82	193	4.27	171	3.74	150	3.2	128
4.8	192	4.24	170	3.72	149	3.17	127
4.77	191	4.22	169	3.7	148	3.15	126
4.75	190	4.19	168	3.67	147	3.12	125
4.72	189	4.17	167	3.65	146	3.1	124
4.7	188	4.14	166	3.62	145	3.07	123
4.67	187	4.12	165	3.57	143	3.02	121
4.65	186	4.09	164	3.55	142	3	120
4.62	185	4.07	163	3.52	141	Less than 3	Not enough
4.6	184	4.04	162	3.5	140		
4.57	183	4.02	161	3.47	139		
4.52	181	3.99	160	3.45	138		
4.5	180	3.97	159	3.42	137		
4.47	179	3.94	158	3.4	136		

*Students' independent work* is assessed during the current control of the topic in the relevant lesson. Assimilation of topics that are submitted only for independent work is controlled during the final control.

Scores in the discipline are independently converted into both the ECTS scale and the 4-point (national) scale. ECTS scores are not converted to a 4-point scale and vice versa.

The scores of students studying in one specialty, taking into account the number of scores earned in the discipline are ranked on the ECTS scale as follows:

ECTS grade	Statistical index
A	Best 10 % of students
B	Next 25 % of students
C	Next 30 % of students
D	Next 25 % of students
E	Last 10 % of students

Ranking and awarding with marks „A”, „B”, „C”, „D”, „E” is conducted for students of the given course, who undergo a course of studies on the same specialty and finished studying of the discipline successfully. Students, who achieved grades FX, F («2») are not included to the student ranking list. Students with grade FX achieve grade „E” automatically after the retest.

Discipline's scores for students, who fulfilled the program successfully, are converted into traditional 4-score scale on the basis of following absolute criteria:

Points on discipline	Grade in 4-point scale
From 170 to 200	5
From 140 to 169	4
From 139 to 120 (minimal number of points which student should get)	3
Less than minimal number of points which student should get	2

ECTS grade is not converted into a traditional score, because both ECTS scale and 4-point scale are independent.

Objectivity of studying activity of the students the assessment is audited by the statistical methods (correlation coefficient between ECTS scale and scale in national score).

### **13. METHODOLOGICAL SUPPLY**

- Testing questions for the topics of practical lessons
- Testing questions for the final module control
- List of theoretical questions for the final module control
- Exercises for the current control of knowledge
- Exercises for the final module control
- List of tasks for independent work
- Study guide for the practical lessons
- Study guide for the independent work of students

### **14. RECOMMENDED LITERATURE**

#### **Basic literature:**

1. Public health: study guide / by general ed. Gruzzeva 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 literature:**

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.

### **15. INFORMATION RESOURCES**

1. 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>

1. 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>

2. 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>

2. 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>

3. 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>