


**PRIVATE HIGHER EDUCATIONAL INSTITUTION
"INTERNATIONAL ACADEMY OF ECOLOGY AND MEDICINE"
Department of social medicine and humanitarian disciplines**

"APPROVED"

Head of Department
 Lyudmila DUDARENKO
"31" August 2022

WORKING PROGRAM OF EDUCATIONAL DISCIPLINE

**" Social medicine, organization and economy of
healthcare "**

LEVEL OF HIGHER EDUCATION Second (master's) level
DEGREE OF HIGHER EDUCATION Master's degree
BRANCH OF KNOWLEDGE 22 Healthcare
SPECIALTY 222 Medicine

Reviewed and approved
at the meeting of the department of social medicine and
humanitarian disciplines
Protocol No. 1 dated August 31 , 2022

Kyiv 2022

Working program of educational discipline **Social medicine, organization and economics of health care** for the preparation of students of higher education of the second (master's) level of higher education in specialty 222 Medicine.

Developer : Phd in medicine Kucherenko N.T.

Agreed

The first vice-rector

A handwritten signature in blue ink, appearing to read 'ASOROKA', is written over a horizontal line.

Oleksandra SOROKA

1. Introduction

The program of the educational discipline " Social medicine, organization and economics of health care " is compiled in accordance with the educational and professional program for training specialists of the second (master's) level of specialty 222 Medicine, fields of knowledge 22 Health care, the Law of Ukraine "On Higher Education " from 01.07.2014 No. 1556- VII (Article 13, Clause 7), the provision "On the organization of the educational process at the International Academy of Ecology and Medicine" PVNZ, methodical recommendations approved by the Central Methodical Office of Higher Medical Education of the Ministry of Health of Ukraine regarding the development of programs of educational disciplines in accordance with industry standards of higher education. The discipline "Social medicine, organization and economics of health care" belongs to the Professional training section of the training plan for students of higher education of the second educational (master's) level.

DESCRIPTION OF THE EDUCATIONAL DISCIPLINE

Name indicators	Branch knowledge , direction training , educational and qualification level	Characteristics of the educational disciplines
		full- time education
Number credits - 2.5	Branch of knowledge: 22 " Healthcare "	Normative
General the number of hours is 75		Specialty : 222 " Medicine "
	6 th	
	Semester	
	12th	
		Lectures
Weekly hours for daytime forms teaching	Educational qualification level : master	0 hours
		Practical , seminar
		50 hours
		Laboratory
		0 hours
		Independent work
		25 hours
		Individual tasks :
Type of control: Current and final , modular		

2. EXPLANATORY NOTE AND STRUCTURE OF THE COURSE

Program in the discipline " Social medicine, organization and economy protection health " for students higher medical educational institutions education Ukraine PI-IU levels accreditation compiled for:

- specialty 7.12010001 "Medical business", field of knowledge 1201 "Medicine", for: educational and qualification level "Specialist" with the qualification " Doctor ",

The program was compiled in accordance with the training plan for specialists of the educational qualification level "Specialist", relevant qualifications and specialties in higher educational institutions of the Ministry of Health of Ukraine, taking into account the educational and qualification characteristics of the industry standard of higher education of Ukraine in this direction (order of the Ministry of Health of Ukraine Kho539 dated 08.07.2010 , resolution of the Cabinet of Ministers of Ukraine dated April 29, 2015.

No. 266 "On the approval of the list of fields of knowledge and specialization") and working training plans, discussed and approved at the meeting of the Scientific Council of MAEM.

SOCIAL MEDICINE, ORGANIZATION AND ECONOMICS OF HEALTH CARE

as an academic discipline:

- a) is based on students' study of academic disciplines: history of medicine, sociology and medical sociology, hygiene and ecology, biostatistics, informatics, ethics, fundamentals economic theories;
- b) integrates with these disciplines and subsequently with clinical and hygienic ones disciplines;
- c) provides a study of the legal, organizational and economic foundations of the security industry health;
- d) lays the foundations for studying the organization of the treatment and diagnostic process, as well as evaluation its volume and quality in the study of clinical disciplines;
- e) contributes to the formation of the preventive direction of the activities of future doctors, taking into account the possible impact on the health of the population of factors of various origins when developing complex medical and social measures;
- e) specifies the methods and means of forming a healthy lifestyle;
- g) promotes the formation of economic thinking adapted to the requirements of the market economy;
- h) forms skills for solving financial, economic and economic problems of medical institutions and enterprises in order to make effective management decisions.

The term of study of the academic discipline "Social medicine, organization and economics of health care" is carried out by students in the 6th year, in the 11th - 20th semesters.

3. THE PURPOSE OF STUDYING THE EDUCATIONAL DISCIPLINE

The **PURPOSE** of the educational discipline "**Social medicine, organization and economics of health care**" derives from the goals of the educational and professional training program for graduates of a higher medical educational institution and is determined by the content of those systemic knowledge and skills that a specialist doctor should master. The knowledge that students receive from the academic discipline is basic for the block of disciplines that provide natural-scientific (*PN block*) and professional-practical (*PP block*) training.

The study of social medicine, the organization and economics of health care forms in students a sufficient amount of knowledge about the organization of medical provision of the population in the conditions of the functioning of the modern health care system. Subject task:

- a) assimilation of theoretical foundations, modern principles, regularities and legal foundations of public health and the system of its protection;
- b) mastering the methods of determining and analyzing the main indicators of public health in relation to the factors influencing it;
- c) familiarization with the principles of evaluating the organization and quality of providing various types of medical care and sanitary-epidemiological provision of the well-being of the population in the conditions of reforming the health care sector;
- d) mastering the principles of developing measures to improve the health of the population and its individual contingents;
- e) formation of knowledge on the issue of loss of working capacity, its types, order of organization of examination of working capacity and actions of medical workers regarding specific situations of examination of loss of working capacity;
- e) familiarization and interpretation of laws and principles of management;
- g) assimilation of the principles of development of management solutions aimed at improving the activity of health care institutions;
- h) the ability to develop strategic and tactical plans for the economic development of a medical institution;
- i) definition of a marketing strategy that will ensure maximum satisfaction of the population's needs for medical care;
- k) determination of the price policy aimed at the implementation of the strategic and operational tasks of the medical institution;
- l) development of a business plan for entrepreneurial activity in the health care system;
- m) the ability to determine the insurance premium for voluntary medical insurance;
- n) the ability to determine the optimal method of paying medical service providers;
- o) the ability to conduct an economic analysis of the activities of medical institutions and enterprises.

The description of goals is formulated through skills in the form of target tasks (actions). On the basis of the final goals, specific goals are formulated in the form of certain knowledge, target tasks, which ensure the achievement of the final goal of studying the discipline. The final goals are located at the beginning of the program and precede its content.

As a result of studying the discipline "Social medicine, organization and economics of health care", the student should know:

- basic accounting documents for the study of population health indicators (demographic, morbidity, disability), activities of the main health care institutions;
- determination of health indicators, activity of health care institutions (with the use of appropriate statistical methods learned in the study of biostatistics);
- determining the doctor's tactics in the process of examination of the loss of working capacity (temporary and permanent), filling out the relevant documents;
- assessment of the quality of medical care;
- development of management solutions aimed at improving the health of the population and optimizing medical care;
- the main strategic and tactical plans for the economic development of the medical institution; definition of a marketing strategy that will ensure the maximum satisfaction of the population's needs in medical care;
- determination of the price policy aimed at the implementation of the strategic and operational tasks of the medical institution;
- development of a business plan for entrepreneurial activity in the health care system; the basic principles of determining the insurance premium for voluntary health insurance;
- principles of determining the optimal payment method for medical service providers;
- stages of conducting an economic analysis of the activities of medical institutions and enterprises.

As a result of studying the discipline "Social medicine, organization and economics of health care", the student should be able to:

- interpret the main methods of determining and assessing the state of health of the population in relation to the factors affecting it;
- develop measures to optimize the activities of doctors and health care institutions;
- to be able to determine and analyze the influence of the main factors determining the state of public health;
- to develop management solutions aimed at improving the activities of the main health care institutions;
- to be able to analyze the state of the health care services market using marketing research;
- determine the price policy in health care institutions;
- be able to organize advertising activities in the field of health care and evaluate its effectiveness;
- to be able to conduct an economic and financial analysis of the activities of health care institutions;
- develop management solutions aimed at improving the activities of medical and preventive institutions and meeting the needs of the population in medical care.

4. PROGRAM OF EDUCATIONAL DISCIPLINE

The discipline program is structured into two sections.

Section I. Application of a set of statistical methods for health assessment population and activities of medical institutions. Organization of primary, secondary and tertiary medical and preventive care for the population.

Section II . Economics of health care.

The types of training according to the curriculum are:

- A) practical classes;
- B) independent work of students;
- C) consultations.

Practical classes involve a detailed examination by students of individual theoretical provisions of the academic discipline with the teacher and the formation of the skills and abilities of their practical application through the student's individual performance of formulated tasks and solving situational problems.

The independent work of students involves the student's mastery of the educational material, namely, the independent study of individual topics of the academic discipline in the time free from mandatory educational classes, and also involves preparation for all types of control. The educational material of the discipline provided for by the working curriculum for assimilation by the student in the process of independent work is submitted to the final control along with the educational material that was processed during the classroom classes

Consultations (individual or group) are held with the aim of helping students to understand and clarify issues that are difficult for independent understanding, to solve complex problems that arose during independent processing of educational material in preparation for a practical class, a final class or before an exam.

Adequate teaching methods are used when studying the discipline. According to sources of knowledge, teaching methods are used: verbal - story, explanation, lecture, instruction; visual - demonstration, illustration; practical - practical work, problem solving. According to the nature of the logic of knowledge, methods are used: analytical, synthetic, analytical-synthetic, inductive, deductive. According to the level of independent mental activity, the following methods are used: problem-based, partially investigative, research.

5. PROGRAM CONTENT

CHAPTER I. "APPLICATION OF A COMPLEX OF STATISTICAL METHODS FOR ASSESSING THE STATE OF HEALTH OF THE POPULATION AND THE ACTIVITIES OF MEDICAL INSTITUTIONS. ORGANIZATION OF PRIMARY, SECONDARY AND TERTIARY MEDICAL AND PREVENTIVE ASSISTANCE TO THE POPULATION"

Specific goals:

- to be able to apply the basic methods of statistical analysis to determine and assess the state of health of the population;
- be able to determine and interpret medical indicators of population health;
- to be able to determine and analyze the influence of the main factors determining the state of public health;
- to be able to analyze the structure, staff and activity of various types of medical and preventive facilities that provide the population with primary, secondary and tertiary medical and preventive care;
- evaluate the effectiveness of the organization of providing primary, secondary and tertiary care to different contingents of the population;
- to be able to develop measures to improve the organization and activity of medical institutions of various levels of providing medical and preventive care;
- to be able to determine the procedure for conducting a medical and social examination of the loss of working capacity in the work of various medical and preventive institutions

Topic 1. Assessment of the health status of the population based on a set of statistical indicators.

The application of statistical methods for determining and assessing the health status of the population in relation to the factors that determine it (relative and average values, standardization method, correlation-regression analysis, assessment of the probability of results from statistical research using parametric and non-parametric methods). Determination of the main integral indicators of the state of health of the population. Identification of sources and/or locations of information for studying and assessing the health status of the population (demographic indicators, morbidity, disability, etc.). Development of management solutions aimed at improving the health of the population.

Topic 2. Methods of studying and evaluating indicators of population health and reproductive health.

Normative and legal principles of preservation of reproductive health of the population. Determination of the main indicators characterizing the health of the population and reproductive health. Assessment of regional characteristics and modern trends in reproductive health indicators. Analysis of factors affecting reproductive health, in particular the birth rate, frequency of abortions, morbidity of the female population, maternal mortality, and infant mortality. Development of measures to optimize the system of preserving the reproductive health of the population.

Topic 3. Use of statistical information to evaluate medical activity of institutions

Determination of the main types of accounting and reporting documentation used to evaluate the activity of medical institutions. Application of statistical methods (relative and average values, standardization method, correlation-regression analysis, parametric and non-parametric assessment of the probability of research results, point and rating assessment) to evaluate the activity of medical institutions. According to specific situations, the definition and analysis of the main indicators of activity: institutions of primary medical and sanitary care, secondary (specialized) and tertiary (highly specialized) medical and preventive care. According to specific situations, the definition and analysis of individual indicators of the quality of providing medical care to the population. Determination of criteria of medical and social efficiency of the organization of medical care. Development of measures to optimize the work of various types of health care institutions.

Topic 4. Organization of providing primary medical care to the population.

Depending on the demographic changes, changes in the morbidity of adults and children, the spread of socially dangerous diseases, the determination of measures to improve primary medical care (PMD) by improving the organization of the main institutions providing PMD to the adult population of the city: family doctor's outpatient clinic, polyclinic, women's consultation, medical sanitary department, first aid station, hospice, nursing hospital. Determination of the possibilities of integration of cooperation of the main institutions in providing PMD to certain groups of the population: the elderly, persons with mental disorders, patients with HIV/AIDS, etc. Depending on the specific situation, determining the role of day inpatients. Analysis of the features of providing PMD to the rural population: rural medical clinic, paramedic-midwifery center, district hospital. Evaluation of the organization of PMD structures for providing medical care to children. Peculiarities of providing PMD to children in rural areas.

Topic 5. Organization of provision of secondary (specialized) and tertiary (highly specialized) medical and preventive care to the population.

Taking into account modern transformational changes in the state of health of the population of Ukraine, determination of new tasks facing medical institutions that provide specialized and highly specialized medical care. Determination of the peculiarities of the structure and staffing of hospitals of different levels (regional, central city, city, central district, district and specialized (infectious, anti-tuberculosis, psychiatric, narcological, etc.)). Assessment of the adequacy of the structure of hospitals to the task of providing specialized and highly specialized medical care to residents of cities and villages, children and adults. Analysis of the tasks, structure and activity of dispensaries (anti-tuberculosis, skin-venerological, psychoneurological, endocrinological, medical and physical education). Development of new organizational forms of medical support for certain groups of the population - HIV-infected, tuberculosis patients, the elderly, senile age etc.

Topic 6. The method of conducting a medical and social examination of temporary and permanent loss of working capacity in the work of various medical and preventive institutions.

Learning the general provisions of the organization of examination of temporary incapacity for work (ETN). Tasks for the organization of ETN at different levels: attending physician, head of a specialized department, medical advisory commission (MCC), deputy chief physician in ETN and responsible person of the health care authority in ETN. Using the doctor's action algorithm when conducting an examination of temporary incapacity. Determination of the sources and/or location of information used in the examination of temporary and permanent disability. According to specific situations, determine the procedure for the examination of temporary incapacity for work in outpatient polyclinic institutions, inpatients, women's consultations, sanatorium-resort institutions. According to specific situations, determine the procedure for carrying out a medical and social examination of permanent disability on the referral of medical and preventive institutions.

SECTION 2. "ECONOMICS OF HEALTH CARE"

Specific goals:

- interpret the effect of economic laws in the health care system and distinguish the main economic categories;
- interpret health as a medical-social, economic category and a special consumer value;
- to be able to apply planning methods in the system of treatment and prevention facilities (strategic, operational, directive, indicative, contractual, business planning);
- to be able to plan the amount of medical assistance and the number of medical personnel in health care institutions;
- interpret the laws of the market and apply them in the practical activities of the doctor;
- to be able to conduct a comprehensive marketing research of the market of medical services for the purpose of making management decisions;
- be able to determine strategic and tactical plans of marketing activities;
- develop management solutions aimed at meeting the needs of the population in medical care by effectively solving economic issues;
- be able to determine the losses of a medical institution from a decrease in demand;
- interpret the essence of entrepreneurship and organizational and legal forms of entrepreneurial activity;
- be able to draw up a business plan of a medical production enterprise;
- interpret the essence of financial management in the organization of the work of medical institutions;
- to be able to carry out financial planning of the activities of medical institutions (estimation);
- interpret different types of payment of medical service providers;
- be able to calculate the salary of medical personnel in the conditions of insurance medicine;
- interpret the main price-forming factors, mechanisms of formation and regulation of prices in health care;
- be able to develop a price policy aimed at the implementation of the strategic and operational tasks of a medical institution;
- interpret the economic essence of health insurance;
- be able to determine the insurance tariff for voluntary medical insurance;
- interpret the content of financial reliability of insurance;
- interpret the essence of economic analysis in the health care system;
- be able to analyze the effectiveness of alternative medical interventions;
- to be able to analyze the medical, social and economic effectiveness of providing medical care;
- to be able to determine and evaluate the financial condition of a medical enterprise.

Topic 1. Development of ways to improve the economic mechanism in the health care system.

Methods of planning in the health care system.

Health and health care as economic categories. Health economics: subject, methods, purpose, tasks and role of the course in the system of higher education. Specificity and mechanisms of action of economic laws in the sphere of health care. General economic and managerial aspects of planning in the field of health care. Methods of planning the amount of medical care and the number of medical personnel. Health care development strategy.

Topic 2. Methods of health care market research.

Organization of marketing activities of medical institutions.

Patterns of formation, functioning and features of the health care market. Health care market situation: demand, supply, price, competition. Price elasticity of demand as a tool for rational use of limited industry resources. Medical services and their properties. Competition, types of competitive structures. The essence, principles, functions, tasks and purpose of marketing. The process of marketing research. Analysis of medical services market opportunities.

Marketing strategy and tactics. Means of dissemination of information and assessment of advertising effectiveness. Marketing control.

Topic 3. Methodology for drawing up a business plan for entrepreneurial organization activities in the field of health care.

The essence of entrepreneurship and its features in health care. Legal principles of entrepreneurial activity in health care. Organizational legal forms of entrepreneurial activity. Business plan as a tool for regulating entrepreneurial activity.

Topic 4. Methodology of financial planning of medical institutions.

The content and significance of financial management in health care. The structure of the country's financial system. Sources of industry funding. Basic financial models of healthcare systems. The budget, the mechanism of its formation in Ukraine. Methodology of financial planning of medical institutions (estimate).

Topic 5. Methods of payment of medical service providers.

The essence, types and requirements for payment systems of medical service providers. Comparative characteristics of payment methods for primary, secondary and tertiary medical care. The method of calculating wages for medical workers.

Topic 6. Pricing methods and price regulation in the health care system.

Price as an economic category, its significance for the economic activity of the healthcare industry. Types of prices in the field of health care. Peculiarities of price formation and regulation in the health care system. Development of a price strategy in order to implement economic tasks in medical institutions and enterprises.

Topic 7. The method of determining the insurance tariff for voluntary medical insurance.

Content of health insurance. Types of medical insurance and features of their organization. The economic essence of medical insurance. Economic analysis of health insurance systems of some developed countries. The place and role of the general practitioner in the health insurance system. Organization of quality control of medical services in the conditions of insurance medicine. Financial reliability of the insurer. Insurance reserves. The method of determining the insurance tariff.

Topic 8. Methods of economic evaluation in the field of health care.

The essence and significance of economic analysis for the health care system, medical enterprise. Methods of economic assessment as a tool for rational use of industry resources: "cost minimization", "cost-effectiveness", "cost-benefit", "cost-utility".

Topic 9. Methods of determining medical, social and economic efficiency activities of health care institutions.

Indicators and criteria of medical effectiveness of health care institutions. Social efficiency, its criteria. Determination and analysis of the economic efficiency of health care institutions. Study of economic losses in case of temporary loss of working capacity caused by population morbidity and injuries. Economic effect and economic efficiency. Direct costs and indirect losses associated with morbidity and disability of the population.

Topic 10. Methodology of financial analysis of economic activity of a medical enterprise.

The essence of financial analysis in health care. Analysis of the financial state of the medical enterprise. Determination of the main indicators of the effectiveness of the financial activity of medical and industrial enterprises for the purpose of making management decisions.

6. LECTURE TOPICS - not provided

7. TOPICS OF PRACTICAL LESSONS

No	Topics	Number of hours
CHAPTER I. "APPLICATION OF A COMPLEX OF STATISTICAL METHODS FOR ASSESSING THE STATE OF HEALTH OF THE POPULATION AND THE ACTIVITIES OF MEDICAL INSTITUTIONS. ORGANIZATION OF PRIMARY, SECONDARY AND TERTIARY MEDICAL AND PREVENTIVE ASSISTANCE TO THE POPULATION"		
1	Assessment of the health status of the population based on a set of statistical indicators.	7
2	Methods of studying and evaluating indicators of population health and reproductive health	7
3	Organization of providing primary medical care to the population	7
	Organization of provision of secondary (specialized) and tertiary (highly specialized) medical and preventive care to the population	
4	The method of conducting a medical and social examination of temporary and permanent disability in the work of various medical and preventive institutions	7
IN TOTAL:		28
IN SECTION 2. "ECONOMICS OF HEALTH CARE"		
5	Development of ways to improve the economic mechanism in the health care system. Methods of planning in the health care system.	7
	Methods of health care market research.	
	Organization of marketing activities of medical institutions	
6	The methodology of drawing up a business plan when organizing business activities in the field of health care.	7
	Methodology of financial planning of medical institutions.	
	Payment methods for medical service providers.	
	Methods of pricing and price regulation in the health care system.	
7	The method of calculating the insurance tariff for voluntary medical insurance.	8
	Methods of economic evaluation in the field of health care.	
	Methods of determining the medical, social and economic efficiency of health care institutions.	
	Methodology of financial analysis of economic activity of a medical enterprise.	
IN TOTAL:		22

9 INDEPENDENT WORK

No	Topic	N hours
CHAPTER I. "APPLICATION OF A COMPLEX OF STATISTICAL METHODS FOR ASSESSMENTS OF THE STATE OF HEALTH OF THE POPULATION AND THE ACTIVITIES OF MEDICAL INSTITUTIONS ORGANIZATION OF PRIMARY, SECONDARY AND TERTIARY MEDICAL AND PREVENTIVE ASSISTANCE TO THE POPULATION"		
1	Assessment of the health status of the population based on a set of statistical indicators	2
2	Methods of studying and evaluating indicators of reproductive health of the population	2
3	Use of statistical information to evaluate the activity of medical institutions	1
4	Organization of providing primary medical care to the population	1
5	Organization of provision of secondary (specialized) and tertiary (highly specialized) medical and preventive care to the population	2
6	The method of conducting a medical and social examination of temporary and permanent loss of working capacity in the work of various medical and preventive institutions	2
IN TOTAL:		10
SECTION 2. "ECONOMICS OF HEALTH CARE"		
1	Development of ways to improve the economic mechanism in the health care system. Methods of planning in the health care system.	2
2	Methods of health care market research. Organization of marketing activities of medical institutions.	2
3	The methodology of drawing up a business plan when organizing business activities in the field of health care.	2
4	Methodology of financial planning of medical institutions.	2
5	Payment methods for medical service providers.	1
6	Methods of pricing and price regulation in the health care system.	1
7	The method of calculating the insurance tariff for voluntary medical insurance.	1
8	Methods of economic evaluation in the field of health care.	1
9	Methods of determining medical, social and economic efficiency of health care institutions.	1
10	Methodology of financial analysis of economic activity of a medical enterprise.	2
IN TOTAL:		15

Scheme of accrual and distribution of points received by students of higher education.

Evaluation of current educational activity . During the assessment of mastery of each topic for the current educational activity, the student is given grades on a 4-point (national) grading scale. At the same time, all types of work provided for by the discipline program are taken into account. The student must receive a grade in each topic. Estimates given on a traditional scale are converted into points. Summary and evaluation for the current one educational activity is recognized as the arithmetic mean (sum of marks for each occupation divided by the number of classes in the semester) and converted into points according to **Table 1**.

Table 1. Recalculation of the average grade for the current activity into a multi-point scale (for disciplines ending with a differential credit)

4-point scale	120-point scale	4-point scale	120-point scale	4-point scale	120-point scale	4-point scale	120-point scale
5	120	4.45	107	3.91	94	3.37	81
4.95	119	4.41	106	3.87	93	3.33	80
4.91	118	4.37	105	3.83	92	3.29	79
4.87	117	4.33	104	3.79	91	3.25	78
4.83	116	4.29	103	3.74	90	3.2	77
4.79	115	4.25	102	3.7	89	3.16	76
4.75	114	4.2	101	3.66	88	3.12	75
4.7	113	4.16	100	3.62	87	3.08	74
4.66	112	4.12	99	3.58	86	3.04	73
4.62	111	4.08	98	3.54	85	3	72
4.58	110	4.04	97	3.49	84	Less than 3	Not enough
4.54	109	3.99	96	3.45	83		
4.5	108	3.95	95	3.41	82		

Maximum quantity points as much as possible recruit a student for the current one educational activity for admission to the diff. credit is 120 points .

Minimal number points , which the student must score for the current one educational activity for admission to the diff. credit is 72 points . Calculation quantity points are made on the basis of the grades received by the student on a 4-point (national) scale during study disciplines , by calculation average arithmetic (SA), rounded to two signs after commas _

Assessment of individual student tasks . Points for individual tasks are awarded only under conditions of their successful completion and defense. The number of points awarded for different types of individual tasks depends on their volume and importance, but no more than 10-12 points. They are added to the sum of points scored by the student in classes during the current educational activity. In no case can the total amount for the current activity exceed 120 points.

Assessment of students' independent work . Students' independent work, which is provided for by the topic of the lesson along with classroom work, is evaluated during the current control of the topic in the corresponding lesson. The mastery of topics that are presented only for independent work is checked during the final control.

Maximum quantity points as much as possible recruit a student during assembly diff. credit is **80 points** .

Assessment final control is considered enrolled , if the student scored at least 60% of maximum Sumy points (for a 200-point scale - no less **50 points**).

Determining the number of points that the student scored in the discipline: the number of points that the student scored in the discipline is determined as the sum of points for the current educational activity and for the final control (dif. credit).

Conversion quantity points from the discipline into grades on the ECTS scale and on a four-point (traditional) scale

Points from disciplines regardless are converted both to the ECTS scale and to the national rating scale , but not vice versa . **Table 2**.

Criteria installation evaluations according to the traditional 4-point and ECTS by the composition scale exam :

Score in points	Rating by national scale	Rating according to the ECTS scale
180-200	Perfectly	A
160 -179	Fine	B
150-159		C
130 -149	Satisfactorily	D
120 -129		E
50 - 119	Unsatisfactorily	FX
0-49		F

Criteria assessment .

During the evaluation of the mastery of each topic for the current educational activity, the higher education applicant is given grades according to the national (traditional) scale, taking into account the approved evaluation criteria:

- *grade "excellent" (5)* - the student flawlessly mastered the theoretical material of the topic of the lesson, demonstrates deep and comprehensive knowledge of the relevant topic, the main provisions of scientific primary sources and recommended literature, thinks logically and constructs an answer, freely uses the acquired theoretical knowledge when analyzing practical material, expresses his attitude to certain problems, demonstrates a high level of assimilation of practical skills;
- *grade "good" (4)* - the student learned well theoretical material occupation , owns main aspects from primary sources and recommended literature , reasoned teaches his _ owns practical skills , expresses your considerations about those or other problems, but it is assumed certain inaccuracies and errors in logic presentation of the theoretical content or when performing practical skills ;
- *grade "satisfactory" (3)* - the student has mostly mastered it theoretical knowledge educational topic, orientated in primary sources and recommended literature , but unconvincingly answers , confuses concepts , additional question cause insecurity in the student or absence stable knowledge ; answering questions of a practical nature, reveals inaccuracies in knowledge , does not know how evaluate facts and phenomena , connect their from the future activity is assumed execution errors _ practical skills ;
- *grade "unsatisfactory" (2)* - student did not master educational the material of the topic, does not know scientific facts , definitions , almost does not focus on primary sources and recommended literature , absent scientific thinking , practical skills are not formed .

Presented according to the traditional rating scale are converted into points . Minimal number points , which the student must score for the current one educational activity per semester for admission to the exam is 120 points .