

**MINISTRY OF HEALTHCARE OF UKRAINE
POLTAVA STATE MEDICAL UNIVERSITY**

Department of Internal Medicine №2

«AGREED»

Guarantor of the educational and
professional program

in specialty 222 «Medicine»

_____ (I.M. Skrypnyk)

“ _____ ” _____ 20__

«APPROVED»

Chairman of the Academic Council of the
Faculty

_____ (M.M. Riabushko)

Minutes as of _____ 20__ No. __

SYLLABUS

Medical Practice

Normative discipline

academic and professional level

the second (master's) level of higher
education

field of knowledge

22 «Healthcare»

specialty

222 «Medicine»

academic qualification

Master of Medicine

professional qualification

Medical Doctor

academic and professional program

full-time

mode of study

course(s) and semester(s) of study of
the discipline

5th year, IX-X semesters

**Module 1. Medical Practice: Acting of the Family Physician
(Therapeutic Aspect)**

5th year of study

«RESOLVED»

at the meeting of the Department of
Internal Medicine №2

Head of the Department _____ (I.P. Katerenchuk)

Minutes as of _____ 20__ No. __

INFORMATION ABOUT LECTURERS WHO DELIVER THE ACADEMIC DISCIPLINE

Surname, name, patronymic of the lecturer (lecturers), scientific degree, academic title	Kostrikova Iuliya Anatoliivna - Candidate of Medical Sciences, docent Myakinkova Lyudmyla Oleksandrivna - Candidate of Medical Sciences, docent Mohnachov Oleksandr Volodymyrovych - Candidate of Medical Sciences, Assistan
Profile of the lecturer (lecturers)	https://www.umsa.edu.ua/fakultets/med/kafedry/vn-med-two/workers
Contact phone	+380675301401
E-mail:	vnutrmed2@gmail.com
Department page at the website of PSMU	https://www.umsa.edu.ua/fakultets/med/kafedry/vn-med-two

MAIN CHARACTERISTICS OF THE COURSE

The amount of the discipline

Number of credits / hours – 30, of which:

Lectures (hours) – 0

Practical (seminars) (hours) – 8

Independent work (h) – 22

Type of control - semester final certification (SFC)

Signs of academic discipline

The nature of the discipline is normative

Year of study – 5

The policy of the academic discipline is regulated by a system of requirements that a lecturer imposes on a student in the study of the discipline and is based on the principles of academic integrity. The policy of the academic discipline is determined by the system of requirements that the scientific and pedagogical staff impose on applicants for education in the study of the discipline Medical Practice: Acting of the Family Physician (Therapeutic Aspect) and is based on the principles of academic virtue.

<https://www.umsa.edu.ua/fakultets/nnipo/akademichna-dobrochesnist-ft-nnipo-elpy>

Compliance with the academic virtue of education applicants in the discipline provides:

- independent performance of academic tasks, tasks of current and final control of learning outcomes;
- reference to the sources of information when using ideas, developments, statements, information;
- observance of norms of legislation on copyright and related rights;
- provision of reliable information about the results of own educational or scientific activity, used research methods and information sources.

The following are considered violations of academic virtue: academic plagiarism, self-plagiarism, fabrication, falsification, copying, cheating.

For violations of academic virtue, applicants for education may be held liable according to the regulations.

Applicants, studying the discipline " Medical Practice: Acting of the Family Physician (Therapeutic Aspect)", are obliged to:

- follow the schedule of the educational process and prevent non-fulfillment of the curriculum and individual curriculum without good reason, come to class on time, in accordance with the schedule of classes
(<https://www.umsa.edu.ua/shedule>)
- comply with the requirements for labor protection, safety, industrial sanitation, fire safety, provided by the relevant rules and instructions;
- comply with the requirements for the appearance (dress code) of persons, approved by the decision of the Rector's Office of 29.08.2014
- maintain order in the rooms of the PHC, treat property (furniture, appliances) carefully and neatly;
- not to take things and various equipment out of the rooms of the PHC without the permission of scientific and pedagogical workers, and in case of intentional damage - to compensate their cost in the manner prescribed by applicable law;
- observance of moral and ethical principles of stay on the territory of clinical bases.

Applicants, studying the discipline "Medical Practice: Acting of the Family Physician (Therapeutic Aspect)", prohibited:

- engage in extraneous activities, distract other students and interfere with the teacher;
- use drugs, psychotropic substances and their analogues, alcoholic beverages, smoke on the territory of the clinical base and be indoors in a state of alcohol, drugs or other intoxication;
- commit illegal and immoral acts that may create dangerous conditions for the health and / or life of others, which degrade human dignity, use profanity;

(Rules of procedure for students of the Poltava State Medical University:

<https://www.umsa.edu.ua/n-process/departament-npr/normativni-dokumenti>)

Description of the discipline (abstract)

"Medical Practice: Acting of the Family Physician (Therapeutic Aspect)" Module 1 acting family doctor provides for the independent mastering of higher education by practical skills according to the educational-professional program 222 "Medicine". It is

held at a time when applicants for higher education of the 5th year of the medical faculty have acquired knowledge of internal medicine.

The practice is conducted as an acting family physician (therapist) in accordance with the current curriculum. Industrial practice (medical) of applicants for higher education of the V course in the scope of professional responsibilities of a family doctor (therapist) of the clinic lasts 1 week. Industrial medicine practice in internal medicine Content module 1 " Medical Practice: Acting of the Family Physician (Therapeutic Aspect)" is selective.

When passing the internship, applicants for higher education shall:

- before starting their internship get advice from the head of the department of internship of a higher education institution about the period of internship, documentation and the like;
- get a referral to the Dean's Office to the basic institution for the internship;
- to arrive on time at the base of practice;
- to execute in full all the tasks provided by the program of practice and the instructions of its leaders in the cycles;
- To study and strictly follow the rules of labor protection and safety precautions;
- To carry out, acting in medical institution, rules of the internal labour schedule;
- Be responsible for the assigned work, its results on a par with the staff;
- to keep the diary of practice, other documentation, which is provided by the program of practice;
- at the end of the cycle ("Medical Practice: Acting of the Family Physician (Therapeutic Aspect)") practice to submit to the head of practice of the educational institution a written report on the execution of all tasks provided by the program, completed and endorsed by the direct supervisor of the diary;
- submit the SFC practice in a timely manner.

The subject of the discipline is the consolidation of knowledge and skills in the future professional activity, which are obtained in the process of studying the basic theoretical and clinical disciplines.

During the internship in the center of primary health care (PHC), family outpatient clinic or therapeutic office of the clinic, higher education students should learn the methods of work of a family doctor and therapeutic specialists and gain practical experience in the following areas of future professional activity:

- conducting outpatient reception of patients and healthy people;
- treatment of patients at home and in the day hospital of the clinic, providing them with emergency care;
- early diagnosis of various diseases using all available in the center of PHC or clinic methods of examination;
- dynamic monitoring of the population in order to identify risk factors for various diseases and their prevention;
- selection of patients for sanatorium treatment;
- resolving issues of examination of temporary incapacity for work;
- keeping medical records by a doctor of the relevant specialty;
- work planning, accounting and analysis of morbidity and efficiency of the doctor;

- promotion of sanitary and hygienic knowledge and principles of healthy lifestyle among the population.

Prerequisites and post requisites of the discipline (interdisciplinary links): the study of the discipline is based on previously acquired knowledge by higher education students:

a) propaedeutic of internal medicine, as well as other basic disciplines (medical biology, medical and biological physics, bioorganic and biological chemistry, histology, cytology and embryology, human anatomy, pathomorphology, physiology and pathophysiology, microbiology, virology and immunology, radiology) are integrates with these disciplines;

b) lays the foundations for the study of internal medicine and other clinical disciplines by students, which provides for the integration of teaching with these disciplines and the formation of skills to apply knowledge of occupational diseases in the process of further study and professional activities;

c) lays the foundations for a healthy lifestyle and prevention of dysfunction in the work process.

The purpose and objectives of the discipline

The purpose of the study "Medical Practice: Acting of the Family Physician (Therapeutic Aspect)": is to consolidate practical skills within the competencies and learning outcomes defined in the educational-professional training program for the specialty 222" Medicine "in the field of knowledge 22 "Health care": mastering the basic manipulations and diagnostic methods for diagnosis and choosing the right method of treatment; formation of responsibility of the applicant of higher education, as the future expert for the level of the preparation and its improvement during training and professional activity.

The main objectives of practice are to consolidate the knowledge and skills acquired in the study of basic clinical and theoretical disciplines (examination of the patient, clinical diagnosis, treatment) and further improvement of practical skills, acquaintance with the organization of medical work and working conditions in the family department of the clinic. consolidation of skills of sanitary-educational work.

As a result of studying the discipline, the applicant must be able to:

- conduct surveys and physical examinations of patients and analysis of their results;
- to plan schemes of inspection of the concrete patient depending on features of a clinical course of a disease;
- analyze the results of basic laboratory and instrumental research methods;
- to determine the leading pathological symptoms and syndromes in the most common diseases;
- to carry out differential diagnosis and to make the preliminary diagnosis of the most widespread diseases;
- to interpret the general principles of treatment, rehabilitation and prevention of the most common therapeutic diseases;
- master the methods of diagnosis and emergency care at the pre-hospital stage;
- master the necessary medical manipulations;
- to get acquainted with the maintenance of medical records in the PHC center or clinic;
- to master the moral and deontological principles of a medical specialist and the principles of professional subordination

Production practice provides:

- study by applicants for higher education of the organizational structure of the PHC center or clinic and its individual units, as well as the documentation of the Ministry of Health of Ukraine, which regulates its work;
- participation in outpatient and healthy adults by family doctors and doctors - specialists, mastering the skills of maintaining the necessary documentation by doctors of outpatient clinics;
- mastering the rules of dynamic monitoring of sick and healthy people of certain groups, the possibility of providing medical care in a day and home hospital;
- participation in the formation of the basic principles of a healthy lifestyle for the prevention of the most common diseases among the population;
- knowledge of the main manifestations, risk factors, principles of treatment of the main most common diseases in order to prevent them, early detection and timely provision of necessary care.

Competences and learning outcomes, the formation of which is facilitated by the discipline (integral, general, special, matrix of competencies).

According to the requirements of the standard, the discipline provides the acquisition of higher education competencies:

Integral competence: the ability to solve complex specialized problems and practical problems in professional activities in the field of health care in the specialty "Medicine", or in the learning process, which involves research and / or innovation and is characterized by complexity and uncertainty of conditions and requirements;

General competencies:

GC1. Ability to abstract thinking, analysis and synthesis, the ability to learn and master modern knowledge.

GC 2. Ability to apply knowledge in practical situations.

GC 3. Knowledge and understanding of the subject area and understanding of professional activity.

GC 4. Ability to adapt and act in a new situation.

GC 5. Ability to make informed decisions; work in a team; interpersonal skills.

GC 6. Ability to communicate in the state language both orally and in writing; ability to communicate in a foreign language. Ability to use international Greco-Latin terms, abbreviations and clichés in professional oral and written speech.

GC 7. Skills in the use of information and communication technologies.

GC 8. Definiteness and perseverance in terms of tasks and responsibilities.

GC 9. The ability to act socially responsibly and consciously.

Program learning outcomes for industrial medical practice:

PLO1. Know the structure and functions of individual organs and systems and the human body as a whole in the norm, with the development of pathological processes, diseases; be able to use the acquired knowledge in further training and in the practice of the doctor.

PLO 2. Collect data on patient complaints, life history (professional history in particular) in a health care facility and / or at the patient's home, according to the standard survey scheme.

PLO 3. Assign and analyze additional (mandatory and optional) screening methods (laboratory, radiological, functional and / or instrumental). Evaluate information for the

purpose of differential diagnosis of diseases (according to list 2), using knowledge about the person, his organs and systems, based on the results of laboratory and instrumental research (according to list 4).

PLO 4. Establish a preliminary and clinical diagnosis of the disease (according to list 2) on the basis of leading clinical symptoms or syndromes (according to list 1) by making an informed decision and logical analysis, using the most probable or syndromic diagnosis, laboratory instrumental examination, conclusions of differential diagnosis, knowledge of man, his organs and systems, adhering to the relevant ethical and legal norms.

PLO 5. Determine the necessary work and rest regimen for the treatment of disease (List 2) in a health care facility, at the patient's home and during medical evacuation phases, including field conditions, based on a preliminary clinical diagnosis, using knowledge of the person, his organs and systems, adhering to appropriate ethical and legal standards, by making informed decisions according to existing algorithms and standard schemes.

PLO 6. Prescribe the necessary medical nutrition in the treatment of the disease (according to list 2), in a health care facility, at the patient's home and at the stages of medical evacuation, including in the field on the basis of a preliminary clinical diagnosis, using knowledge about the person, his organs and systems, adhering to the relevant ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes.

PLO 7. To determine the nature of treatment of the disease (conservative, operative) and its principles (according to list 2) in the health care facility, at the patient's home and at the stages of medical evacuation, including in the field on the basis of a preliminary clinical diagnosis, using knowledge about the person, his organs and systems, adhering to the relevant ethical and legal norms, by making an informed decision according to existing algorithms and standard schemes.

PLO 8. Diagnose emergencies and establish a diagnosis (according to list 3) by making an informed decision and assessing the human condition under any circumstances (at home, on the street, in a health care facility), including in emergency situations, in field conditions, in conditions of lack of information and limited time, using standard methods of physical examination and possible anamnesis, knowledge about a person, his organs and systems, adhering to the relevant ethical and legal norms.

PLO 9. Determine the tactics of emergency medical care, under any circumstances, using knowledge about the person, his organs and systems, adhering to the relevant ethical and legal norms, by making an informed decision, based on the diagnosis (list 3) for a limited time with standard schemes.

PLO 10. Provide emergency medical care under any circumstances, using knowledge of the person, his organs and systems, adhering to the relevant ethical and legal norms, by making an informed decision, based on the diagnosis of emergency (list 3) for a limited time according to certain tactics using standard schemes.

PLO 11. Perform medical manipulations (according to list 5) in a health care facility, at home or at work on the basis of a previous clinical diagnosis and / or indicators of the patient's condition, using knowledge of the person, his organs and systems, in accordance with relevant ethical and legal norms, making an informed decision and using standard techniques.

PLO 12 To determine the tactics of management of person's subject to dispensary

supervision in a health care institution or at the patient's home on the basis of the obtained data on the patient's health, using standard schemes, using knowledge about the person, his organs and systems, adhering to relevant ethical and legal norms by making an informed decision.

PLO 13. Carry out an examination of working capacity by determining the presence and degree of disability, type, degree and duration of incapacity with the relevant documents in a health care facility on the basis of data on the disease and its course, features of professional activity.

PLO 14. Maintain medical records of the patient and the population on the basis of regulatory documents, using standard technology. Prepare reports on personal production activities, using official accounting documents in the standard form.

PLO 15. Form goals and determine the structure of personal activity based on the result of the analysis of certain social and personal needs.

PLO 16. Adhere to a healthy lifestyle, use the techniques of self-regulation and self-control.

PLO 17. Aware and guided in their activities by civil rights, freedoms and responsibilities, constantly improving their professional and cultural levels.

PLO 18. Adhere to the requirements of ethics, bioethics and deontology in their professional activities.

PLO 19. Ensure the necessary level of individual safety (personal and carers) in the event of typical dangerous situations in the individual field of activity.

Thematic plan of lectures with the indication of the main issues considered at the lecture

№	Topic	Number of hours
	Not provided by the curriculum	
	Total	

Thematic plan of practical classes with content modules with indication of the main issues considered in the practical lesson

№	Topic	Number of hours
1	Principles of organization of planned and emergency care in an outpatient setting.	4
2	<i>Final modular control</i>	4
	<i>Total</i>	8

Individual tasks

№	Topic	Number of hours
1.	Preparation for practical classes on topics - theoretical training and development of practical skills	21
2.	Elaboration of additional topics that are not included in the list of topics of practical classes is not provided by the program	-
3.	Writing and preparing to defend a medical history. Preparation for the semester final certification	4
Total		25

Самостійна робота

№	Topic	Number of hours
1	Principles of organization of planned and emergency care in an outpatient setting. Admission of patients. Conducting a survey and physical examination of patients. Filling in the medical card of an outpatient. Determining the scope of additional research, evaluation of their results. Establishing a preliminary diagnosis. Determining the tactics of further treatment, rehabilitation, prevention. Labor forecast.	4
2	Work in the office of functional diagnostics: assessment of the function of external respiration, ECG, echocardiography, phonocardiography, radiography and radioscopy of the chest, gastrointestinal tract, gallbladder and kidneys, esophagogastroduodenoscopy, colonoscopy.	6
3	Work in the physiotherapy room: participation in conducting - electrotherapy with direct current, pulsed currents of low and sound frequency, high-frequency electrotherapy, magnetic therapy, aeroionotherapy, ultrasound therapy, heat and hydrotherapy procedures, etc.	6
4	Work in the emergency room of the clinic: examination of the patient, identification of syndromes and the presence of emergencies. Participation in emergency care in emergency situations: acute heart failure, hypertensive crisis, paroxysmal heart rhythm disorders, pulmonary embolism, asthmatic status, acute gastrointestinal bleeding, acute renal failure and more.	6
	Total	22

Individual tasks

- Annotation of additional literature on the topic submitted for independent mastering.
- Work in a research circle with the presentation of abstracts for the conference and reports at student scientific conferences.

The list of theoretical questions for preparation of applicants of higher education for written modular control (SFC).

1. Epidemiology of hypertension and definition. Exogenous and endogenous risk factors for hypertension, methods of active detection, classification. Standards of examination of patients and their rehabilitation. Dynamic monitoring of people with risk factors and the sick. The effectiveness of measures for primary and secondary prevention of hypertension.

2. Epidemiology and prevention of coronary heart disease. Risk factors for coronary heart disease and their correction.

Diagnosis and treatment of various clinical forms of coronary heart disease in an

outpatient setting.

3. Clinical and expert characteristics of cardiovascular diseases.
4. Methods for determining morphological changes and functional disorders in cardiovascular diseases.
5. Indications and contraindications to work in cardiovascular diseases.
6. Criteria for determining disability groups in cardiovascular diseases.
7. Ways of rehabilitation of patients.
8. Epidemiology of bronchial and asthma and definition. Exogenous and endogenous risk factors for asthma, methods of active detection, classification. Standards examination of patients and their rehabilitation. Dynamic surveillance of people with risk factors and patients. Effectiveness of primary and secondary measures prevention of asthma.
9. COPD: risk factors, diagnosis, treatment and prevention.
10. Epidemiology and primary prevention of diseases of the digestive tract.
11. Clinical and expert characteristics of chronic lung diseases. Criteria identification of disability groups. Labor forecast.
12. Helicobacter pylori-associated diseases of the digestive tract: diagnosis, treatment, prevention.
13. Epidemiology of chronic hepatitis and definition. Exogenous and endogenous risk factors for chronic hepatitis and liver cirrhosis, methods of active detection, classification. Standards of examination of patients and their rehabilitation. Dynamic surveillance of people with risk factors and patients. Effectiveness of measures for primary and secondary prevention of chronic hepatitis.
14. Chronic pancreatitis and diseases of the biliary tract - diagnostic criteria, principles of treatment. ITU in diseases of the gallbladder and pancreas
15. Exo- and endogenous risk factors for thyroid disease, diagnosis, prevention, treatment ..
16. Classification, diagnosis and treatment of diabetes mellitus of different types.
17. Algorithms for differential diagnosis of jaundice
18. Algorithms of differential diagnosis in joint syndrome.

List of practical skills for final modular control (FMC).

1. Carrying out of medical reception in the PHC center under the control of the general practitioner - the family doctor and registration: the medical passport of a site
2. Registration of the profile magazine of a site, the magazine of calls of the doctor home the list of the account of daily reception of patients.
3. Registration of the monthly plan of work of the doctor
4. Registration of a medical card of an outpatient and epicrisis.
5. Filling in statistical maps for registration of final (updated) diagnoses.
6. Providing medical care to patients at home under the supervision of a general practitioner - a family doctor.
7. Carrying out the organization of a home hospital, and the necessary additional examinations, consultations at home
8. Provision of medical care in the day hospital of the PHC center under the supervision of a day hospital doctor

9. Carrying out the organization of emergency care at home and in the PHC center, studying the rules of hospitalization for urgent needs.
10. Registration of temporary incapacity for work, certificate of temporary incapacity for work
11. Execution of documents when referring a patient to the ITU (letter of intent) to determine the degree of disability
12. Extraction of prescriptions and registration of prescriptions for free distribution of medicines
13. Conducting dynamic monitoring of patients and the disabled (accounting by nosology, conducting scheduled examinations of patients, treatment, consultations with narrow specialists)
14. Registration of the control card of the dynamic account
15. To make a route of improving actions, restorative food, sanatorium selection at various diseases
16. Registration of certificates for the needs of sanatorium treatment and sanatorium cards
17. To improve the interpretation of the results of laboratory and instrumental tests: general blood test, biochemical blood test, general urine test, Zemnytsky and Nechiporenko test results, fecal and coprogram analysis, sputum analysis, pleural and ascitic fluid analysis, gastric secretion analysis, bile
18. Evaluation of the results of the study of the function of external respiration, ECG, Holter ECG monitoring, DMBP, echocardiography, radiography and radioscopy of the chest, gastrointestinal tract, gallbladder and kidneys, esophagogastroduodenoscopy, colonoscopy.

Form of final control of academic performance - Final modular control ((FMC).

Control measures for assessing the educational activities of higher education students include current and final control of knowledge, skills and abilities.

Control measures are based on the principles of: compliance with higher education standards; use of a standardized and unified diagnostic system aimed at the application of knowledge; definition of evaluation criteria; objectivity and transparency of control technology.

The scientific and pedagogical worker must evaluate the success of the applicant in higher education in each lesson on a four-point (traditional) scale.

Assessment of success is integrated (all types of work of students are evaluated both in preparation for the lesson and during the lesson) according to the criteria that are communicated to them at the beginning of the discipline. Conversion of the current grade, set on the traditional 4-point scale, to multi-point in each lesson is not carried out.

Table 1. Criteria for assessing the knowledge of students:

On a 4-point scale	Assessment in ECTS	Evaluation criteria
5 perfectly	A	The student shows special creative abilities, is able to acquire knowledge independently, without the help of the teacher finds and processes the necessary information, is able to use the acquired knowledge and skills for decision-making in unusual situations, convincingly argues answers, independently reveals own

		talents and inclinations, possesses not less than 90 % of knowledge on the topic both during the survey and all types of control.
4 good	B	The student is fluent in the studied amount of material, applies it in practice, freely solves exercises and problems in standardized situations, independently corrects errors, the number of which is insignificant, has at least 85% knowledge of the topic both during the survey and all types of control.
	C	The student is able to compare, summarize, systematize information under the guidance of a scientific and pedagogical worker, in general, independently apply it in practice, control their own activities; to correct mistakes, among which there are significant, to choose arguments for confirmation of opinions, possesses not less than 75% of knowledge on a subject both during interrogation, and all types of control.
3 satisfactorily	D	The student reproduces a significant part of the theoretical material, shows knowledge and understanding of the basic provisions, with the help of a scientific and pedagogical worker can analyze the educational material, correct mistakes, among which there are a significant number of significant ones. Has at least 65% knowledge of the topic both during the survey and all types of control.
	E	The student has the educational material at a level higher than the initial, a significant part of it reproduces at the reproductive level. Has at least 60% knowledge of the topic both during the survey and all types of control.
2 unsatisfactorily	FX	The student has the material at the level of individual fragments that make up a small part of the material. Has less than 60% knowledge of the topic both during the survey and all types of control.
	F	The student has the material at the level of elementary recognition and reproduction of individual facts, elements, has less than 60% knowledge of the topic both during the survey and all types of control.

The final module control is carried out upon completion of the study of the program material of the module in the discipline at the last practical lesson.

Applicants for higher education who are:

- scored the required minimum number of points during the current control (average score of 3.0 and above),
- do not have unused passes of lectures and practical classes,
- mastered the topics made for independent work within the module.

The FMC score is evaluated in points and is not converted into a traditional 4-point score. The maximum number of FMC points is 80 points. The minimum number of FMC points at which the control is considered to be made is 50 points. The maximum number of points for the module is 200 points (up to 120 points for the current performance).

Methods of conducting the final modular control (FMC) is conducted in the form of an examination-testing, by answering 80 test questions by the student.

The correct answer to 50-60 questions corresponds to a score of "3"; for 60-70 test questions with a grade of "4", for 70-80 questions with a grade of "5".

In case of violation by the applicant of higher education of the rules of academic integrity (p.2.2.5. Of the Rules of Procedure), the evaluation results obtained during the preparation of the FMC for the answer are not credited, the grade is "unsatisfactory".

Applicants for higher education, who during the study of the module from which the final control is conducted, had an average score of current performance from 4.50 to 5.0 are exempted from the FMC and automatically (by agreement) receive a final grade according to the scheme of calculation and distribution of points (see below), and the presence of the student at the FMC is mandatory. In case of disagreement with the assessment, this category of higher education seekers is FMC according to the general rules.

The applicant for higher education has the right to compile and re-compile FMC.

The total score for the module is defined as the sum of the scores of the current performance and FMC.

Scheme of accrual and distribution of points received by applicants for higher education for the current performance of points for FMC, exam and traditional four-point assessment

Middle ball for current progress (A)	Ball for current progress from the module (A*24)	Ball for FMC with module. (A*16)	Points for the module and / or exam (A*24 + A*16)	Category ECTS	By 4-point scale
1	2	3	4	5	6
2	48	32	80	F FX	2 unsatisfactorily
2,1	50	34	84		
2,15	52	34	86		
2,2	53	35	88		
2,25	54	36	90		
2,3	55	37	92		

2,35	56	38	94		
2,4	58	38	96		
2,45	59	39	98		
2,5	60	40	100		
2,55	61	41	102		
2,6	62	42	104		
2,65	64	42	106		
2,7	65	43	108		
2,75	66	44	110		
2,8	67	45	112		
2,85	68	46	114		
2,9	70	46	116		
2,95	71	47	118		
3	72	50	122	E	3 satisfactorily
3,05	73	50	123		
3,1	74	50	124		
3,15	76	50	126		
3,2	77	51	128		
3,25	78	52	130	D	
3,3	79	53	132		
3,35	80	54	134		
3,4	82	54	136		
3,45	83	55	138		
3,5	84	56	140	C	4 good
3,55	85	57	142		
3,6	86	58	144		
3,65	88	58	146		
3,7	89	59	148		
3,75	90	60	150	C	4

3,8	91	61	152		good	
3,85	92	62	154			
3,9	94	62	156			
3,95	95	63	158			
4	96	64	160	B		
4,05	97	65	162			
4,1	98	66	164			
4,15	100	66	166			
4,2	101	67	168			
4,25	102	68	170			
4,3	103	69	172			
4,35	104	70	174			
4,4	106	70	176			
4,45	107	71	178			
4,5	108	72	180	A	5 perfectly	
4,55	109	73	182			
4,6	110	74	184			
4,65	112	74	186			
4,7	113	75	188			
4,75	114	76	190			
4,8	115	77	192			
4,85	116	78	194			
4,9	118	78	196			
4,95	119	79	198			
5	120	80	200			

Teaching methods

- verbal (explanation, story, conversation, instruction)
- visual (observation, illustration, presentation)

- practical (by clinical examination of the patient to interpret and describe changes in organs and systems in various pathological conditions)
- explanatory-illustrative or information-receptive (coverage of ready-made information by a research and pedagogical worker and its assimilation by students)
- thematic discussions, clinical trials
- analysis of specific clinical situations
- partial search, research methods.

Control methods

Entrance control is carried out at the first practical lesson in order to determine the readiness of higher education students to master the discipline by using test control of their basic training.

Current control is carried out during practical classes, which assess the knowledge of theoretical and practical material in the form of:

- individual oral examination on theoretical issues;
- test tasks;
- solving situational problems;
- drawing up a plan of examination of the patient and the ability to interpret the data obtained;
- ability to apply practical skills;
- registration of the plan of treatment of patients.

Final control is to assess the assimilation of higher education students of educational material in the discipline (or part thereof) on the basis of current control.

Methodical support:

1. Plans for lectures, practical classes and independent work of higher education students.
2. Syllabus on discipline.
3. Methodical development of lectures on the discipline.
4. Methodical recommendations for the teacher.
5. Methodical instructions for independent work of applicants for higher education in preparation for practical training.
6. Test and control tasks for practical classes.
7. Questions and tasks to control the assimilation of the section.
8. List of questions to the FMC.
9. Training materials (textbooks, manuals).
10. Visual aids (tables, stands, multimedia materials).

Recommended Books

I. Basic

1. Internal medicine: Part 1: textbook for English-speaking students of higher medical schools/ edited by Professor M.A. Stanislavchuk. and Professor V.K. Siercjva.- Vinnytsy: Nova Knyha, 2019.-408 p.
2. Internal medicine: Part 2: textbook for English-speaking students of higher medical schools/ edited by Professor M.A. Stanislavchuk. and Professor V.K. Siercjva.- Vinnytsy: Nova Knyha, 2019.-360 p.

II. Additional:

1. Harrison's Principles of Internal Medicine, 18 ed. By Dan L. Longo, Anthony S. Fauci, Dennis L. Kasper, Stephen L. Hauser, J. Larry Jameson, Joseph Loscalzo, Eds. The McGraw-Hill Companies. -2011.- Vol. 1 and 2.- p.
2. CURRENT Medical Diagnosis and Treatment 2012, Fifty-First Edition (LANGE CURRENT Series) by Stephen McPhee, Maxine Papadakis and Michael W. Rabow (Paperback - Sep 12, 2011)
3. Davidson's Principles and Practice of Medicine: With STUDENT CONSULT Online Access, 21e (Principles & Practice of Medicine (Davidson's)) by Nicki R. Colledge BSc FRCP(Ed), Brian R. Walker BSc MD FRCP(Ed) and Stuart H. Ralston MB ChB MD FRCP FMedSci FRSE (Paperback - Mar 11, 2010) Kumar and Clark's Clinical Medicine, 7e (Kumar, Kumar and Clark's Clinical Medicine) by Parveen J. Kumar (Paperback - Jul 2, 2009)
4. 1000 Questions and Answers from Kumar & Clark's Clinical Medicine, 2e [Paperback] Parveen Kumar CBE BSc MD FRCP FRCP(Edin) (Editor), Michael L Clark MD FRCP (Editor)
5. Differential Diagnosis in Internal Medicine: From Symptom to Diagnosis by Walter Siegenthaler (Mar 21, 2007)
6. Symptom to Diagnosis: An Evidence Based Guide, Second Edition (LANGE Clinical Medicine) by Scott D. C. Stern (Sep 16, 2009)
7. CURRENT Diagnosis and Treatment Emergency Medicine, Seventh Edition (LANGE CURRENT Series) by C. Keith Stone (May 23, 2011)
8. The Atlas of Emergency Medicine, Third Edition by Kevin Knoop, Lawrence Stack, Alan Storrow and R. Jason Thurman (Aug 4, 2009)
9. Clinical Cardiology 2012 (The Clinical Medicine Series) by M.D. C. G.Weber (Feb 23, 2012) - Kindle eBook

- 10. Clinical Cardiology Made Ridiculously Simple (Edition 4) by Michael A. Chizner (May 13, 2011)**
- 11. Harrison's Gastroenterology and Hepatology by Dan Longo and Anthony Fauci (May 3, 2010)**
- 12. Mayo Clinic Gastroenterology and Hepatology Board Review (Mayo Clinic Scientific Press) by Stephen Hauser (Jun 23, 2011)**
- 13. Gastroenterology and Hepatology Board Review: Pearls of Wisdom, Third Edition (Pearls of Wisdom Medicine) by John K. DiBaise (May 11, 2012)**
- 14. Clinical Pulmonology 2012 (The Clinical Medicine Series) by M.D., C. G. Weber (Oct 30, 2011) - Kindle eBook**
- 15. Clinical Nephrology 2012 (The Clinical Medicine Series) by M.D., C. G. Weber (Sep 19, 2011) - Kindle eBook**
- 16. Clinical Nephrology 2012 (The Clinical Medicine Series) by M.D., C. G. Weber (Sep 19, 2011) - Kindle eBook**
- 17. Hematology: Clinical Principles and Applications, 4e by Bernadette F. Rodak MS MLS (Feb 18, 2011)**
- 18. Rheumatology, 2-Volume Set: EXPERT CONSULT - ENHANCED ONLINE FEATURES AND PRINT, 5e by Marc C. Hochberg MD MPH, Alan J. Silman MD, Josef S. Smolen MD and Michael E. Weinblatt MD (Oct 19, 2010)**
- 19. Endocrine Pathology: Differential Diagnosis and Molecular Advances by Ricardo V. Lloyd (Nov 5, 2010)**
- 20. Clinical Endocrinology 2012 (The Clinical Medicine Series) by M.D., C. G. Weber (Sep 19, 2011) - Kindle eBook**
- 21. Williams Textbook of Endocrinology: Expert Consult-Online and Print, 12e by Shlomo Melmed, Kenneth S. Polonsky MD, P. Reed MD Larsen and Henry M. Kronenberg MD (May 27, 2011)**
- 22. Electrocardiography, 3e with Student CD (Booth, Electrocardiography for Health Care Personnel) by Kathryn A. Booth (Jan 27, 2011)**
- 23. Echocardiography Review Guide: Companion to the Textbook of Clinical Echocardiography: Expert Consult: Online and Print, 2e (Expert Consult Title: Online + Print) by Catherine M. Otto (Mar 7, 2011)**
- 24. Practical Gastrointestinal Endoscopy: The Fundamentals by Peter B. Cotton (Jul 1, 2008)**
- 25. Kovalyova O.M., Asheulova T.V. Propedeutics to internal medicine. Part 1, Diagnostics. Vinnytsya, Nova Knyha, 2006, 424 p**

26. Mayo Clinic Gastroenterology and Hepatology Board Review (Mayo Clinic Scientific Press) by Stephen Hauser (Jun 23, 2011)
27. Clinical Nephrology 2012 (The Clinical Medicine Series) by M.D., C. G. Weber (Sep 19, 2011) - Kindle eBook
28. Clinical Endocrinology 2012 (The Clinical Medicine Series) by M.D., C. G. Weber (Sep 19, 2011) - Kindle eBook
29. Williams Textbook of Endocrinology: Expert Consult-Online and Print, 12e by Shlomo Melmed, Kenneth S. Polonsky MD, P. Reed MD Larsen and Henry M. Kronenberg MD (May 27, 2011)
30. Echocardiography Review Guide: Companion to the Textbook of Clinical Echocardiography: Expert Consult: Online and Print, 2e (Expert Consult Title: Online + Print) by Catherine M. Otto (Mar 7, 2011)
31. Sonographer's Handbook of Diagnostic Ultrasound by Jason R. Young M.D. (Feb 23, 2011)

Electronic resources

https://www.eular.org/eular_imaging_library_portal.cfm#

<http://www.rheumatologyclinic.ca/imagebank/#close>

<https://images.rheumatology.org/bp/#/>

<http://www.oxfordmedicaleducation.com/ecgs/ecg-examples/>

<https://litfl.com/top-100/ecg/>

http://learn.escardio.org/lp/eacvi_echo_elearningcourse/knowledge/078833a3-cafb-4506-b264-11e4e3d968f7/0/curriculumSubTopics

<https://www.123sonography.com/ultrasound-courses>

<https://www.asecho.org/rising-star-hub/echo-images/>

<http://inephrology.kiev.ua/>

<http://phc.org.ua/>

http://mtd.dec.gov.ua/images/dodatki/2014_455_GKS/2014_455%20YKPMD_GKS.pdf

<http://www.WebCardio.org>

Developers:

Katerenchuk I.P. - Head of the Department, Doctor of Medicine, Professor
 Tsyganenko Irina Volodimirivna - Candidate of Medical Sciences, docent
 Mohnachov Oleksandr Volodymyrovych - Candidate of Medical Sciences, Assistant