

MINISTRY OF HEALTH OF UKRAINE

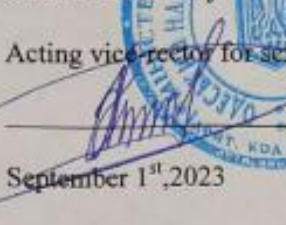
ODESA NATIONAL MEDICAL UNIVERSITY

Department of Family Medicine and Polyclinic Therapy
Department of General Practice

Original

CONFIRMED by

Acting vice-rector for scientific and pedagogical work


Eduard BURIACHKIVSKYI

September 1st, 2023

**WORKING PROGRAM IN THE DISCIPLINE
«GENERAL PRACTICE (FAMILY MEDICINE)»**

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

Field of knowledge: 22 «Health care»

Specialty: 222 «Medicine»

Educational and professional program: Medicine

2023

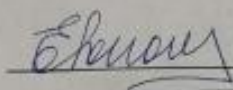
The working program is compiled on the basis of the educational and professional program "Medicine" for the training of specialists of the second (master's) level of higher education in the specialty 222 "Medicine" of the field of knowledge 22 "Health care", approved by the Academic Council of ONMedU (minutes No. 8 dated 29/06/2023).

Authors:

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The working program is approved at the meeting of the Department of General Practice
 Minutes N1 dated 28/08/2023

Head of the department

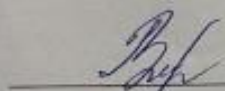


Olena VOLOSHYNA

The working program is approved at the meeting of the department of family medicine and polyclinic therapy

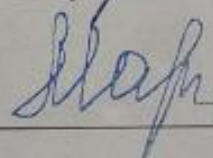
Minutes No. 1 dated 30/08/2023

Head of the department



Valentyna VELYCHKO

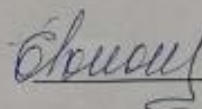
Approved by the guarantor of
 the educational and professional program



Valeria MARICHEREDA

Approved by the subject-cycle methodological commission for therapeutic disciplines of ONMedU
 Minutes N 1 dated 31.08.2023

Head of the subject-cycle methodological commission for therapeutic disciplines of ONMedU



Olena VOLOSHYNA

Description of the discipline:

Name of indicators	Field of knowledge, specialty, specialization, level of higher education	Characteristics of the discipline
Total number:	Field of knowledge 22 «Health care»	<i>Full-time (day) education</i> <i>Compulsory discipline</i>
Credits of ECTS: 3	Specialty 222 «Medicine»	<i>Course: 6</i>
Hours: 90	Level of higher education second (master's degree)	<i>Semester: XI - XII</i>
Content modules: 3		<i>Lectures (0 hours)</i>
		<i>Seminars (0 hours)</i>
		<i>Practical classes (30 hours)</i>
		<i>Laboratories(0 hours)</i>
		<i>Independent work (60 hours)</i>
		<i>including individual tasks (0hours)</i>
		<i>Form of final control – Grading test</i>

2. The purpose and tasks of the educational discipline, competencies, program learning outcomes

The purpose is to master the knowledge and to form the elements of the professional competencies and practical skills in general practice - family medicine and improve the skills and competences acquired during the study of previous disciplines.

The tasks of the discipline are the following:

1. To form skills on differential diagnosis and the most common diseases in patients.
2. To improve skills in verification a clinical diagnosis, making a plan for laboratory and instrumental research.
3. To master the ability to determine treatment and prevention tactics for the most common diseases in patients.

The process of studying the discipline is aimed at forming elements of following competencies:

General competencies (GC):

- GC1. Ability to abstract thinking, analysis and synthesis
- GC 2. Ability to learn and master modern knowledge
- GC 3. Ability to apply knowledge in practical situations
- GC 4. Knowledge and understanding of the subject area and understanding of professional activity
- GC 5. Ability to adapt and act in a new situation
- GC 6. Ability to make reasonable decisions
- GC 7. Ability to work in a team
- GC 8. Ability to interpersonal interaction
- GC 10. Ability to use information and communication technologies
- GC 11. Ability to search, process and analyze information from various sources

Special competencies (SC):

- SC1. Ability to collect medical information about the patient and analyze clinical data
- SC 2. Ability to determine the necessary list of laboratory and instrumental studies and evaluate their results
- SC 3. Ability to establish a preliminary and clinical diagnosis of the disease

- SC 4. Ability to determine the necessary regime of work and rest in the treatment and prevention of diseases
- SC 5. Ability to determine the nature of nutrition in the treatment and prevention of diseases
- SC 6. Ability to determine the principles and nature of treatment and prevention of diseases
- SC 7. Ability to diagnose emergency conditions
- SC 8. Ability to determine tactics and provide emergency medical care
- SC 9. Ability to carry out medical evacuation measures
- SC 10. Ability to perform medical manipulations
- SC 11. Ability to solve medical problems in new or unfamiliar environments in the presence of incomplete or limited information, taking into account aspects of social and ethical responsibility
- SC 13. Ability to carry out sanitary and hygienic and preventive measures
- SC 15. Ability to conduct an examination of working capacity
- SC 16. Ability to fill medical documentation, including electronic forms
- SC 17. Ability to assess the impact of the environment, socio-economic and biological determinants on the state of health of an individual, family, population
- SC21. Ability to clearly and unambiguously convey one's own knowledge, conclusions and arguments on health care problems and related issues to specialists and non-specialists, in particular to people who are studying
- SC 24. Adherence to ethical principles when working with patients and laboratory animals
- SC 26. Ability to determine the management tactics of persons subject to dispensary supervision

Program learning outcomes (PLO):

- PLO 1. Having a thorough knowledge of the structure of professional activity. Being able to carry out professional activities that require updating and integration of knowledge. To be responsible for professional development, the ability for further professional training with a high level of autonomy.
- PLO 2. Understanding and knowledge of basic and clinical biomedical sciences, at a level sufficient for solving professional tasks in the field of health care.
- PLO 3. Specialized conceptual knowledge that includes scientific achievements in the field of health care and is the basis for conducting research, critical understanding of problems in the field of medicine and related interdisciplinary problems.
- PLO 4. Identifying leading clinical symptoms and syndromes (according to list 1); according to standard methods, using preliminary data of the patient's history, data of the patient's examination, knowledge about the person, his organs and systems, establish a preliminary clinical diagnosis of the disease (according to list 2).
- PLO 5. Collecting complaints, history of life and diseases, assessing the psychomotor and physical development of the patient, the state of organs and systems of the body, based on the results of laboratory and instrumental studies, evaluation of the information regarding the diagnosis (according to list 4), taking into account the age of the patient.
- PLO 6. Establishing the final clinical diagnosis by making a reasoned decision and analyzing the received subjective and objective data of clinical, additional examination, carrying out differential diagnosis, observing the relevant ethical and legal norms, under the control of the managing physician in the conditions of the health care institution (according to the list 2).
- PLO 7. Assigning and analyzing additional (mandatory and optional) examination methods (laboratory, functional and/or instrumental) (according to list 4) of patients with diseases of organs and body systems for differential diagnosis of diseases (according to list 2).
- PLO 8. Determination of the main clinical syndrome or symptom that determines the severity of the victim's/victim's condition (according to list 3) by making a reasoned decision about the person's condition under any circumstances (in the conditions of a health care facility, outside its borders), including in conditions of emergency and hostilities, in field conditions, in conditions of lack of information and limited time.
- PLO 9. Determination of the nature and principles of treatment (conservative, operative) of patients with diseases (according to list 2), taking into account the patient's age, in the conditions of a health care institution, outside its borders and at the stages of medical evacuation, including in field conditions, based on a preliminary clinical diagnosis, observing the relevant ethical and legal norms,

by making a reasoned decision according to existing algorithms and standard schemes, in case of the need to expand the standard scheme, be able to justify personalized recommendations under the control of the head physician in the conditions of a medical institution.

PLO 10. Determination of the necessary mode of work, rest and nutrition based on the final clinical diagnosis, observing the relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes.

PLO 14. Determination of tactics and providing emergency medical care in emergencies (according to list 3) in limited time conditions according to existing clinical protocols and standards of treatment.

PLO 16. Formation of rational medical routes for patients; organization of interaction with colleagues in their own and other institutions, organizations and institutions; applying tools for promoting medical services in the market, based on the analysis of the needs of the population, in the conditions of the functioning of the health care institution, its division, in a competitive environment.

PLO 17. Performing medical manipulations (according to list 5) in the conditions of a medical institution, at home or work based on a previous clinical diagnosis and/or indicators of the patient's condition by making a reasoned decision, observing the relevant ethical and legal norms.

PLO 18. Determination of the state of functioning and limitations of a person's vital activities and the duration of incapacity for work with the preparation of relevant documents, in the conditions of a health care institution, based on data about the disease and its course, peculiarities of a person's professional activity, etc. Maintain medical documentation regarding the patient and the contingent of the population based on regulatory documents.

PLO 21. Searching for the necessary information in the professional literature and databases of other sources, analysing, evaluating and application of this information.

PLO 22. Application of modern digital technologies, specialized software, and statistical methods of data analysis to solve complex healthcare problems.

PLO 23. Assessment of the impact of the environment on human health to assess the morbidity of the population.

PLO 29. Planning, organising and carrying out measures for the specific prevention of infectious diseases, including by the National calendar of preventive vaccinations, both mandatory and recommended. Managing vaccine residues, and organization of additional vaccination campaigns, including immunoprophylaxis measures.

PLO 30. Determination of the management tactics of persons subject to dispensary supervision (children, pregnant women, workers whose professions require mandatory dispensary examination).

As a result of studying the discipline, the student has to :

Know:

- principles of organizing medical care at home and in day hospitals;
- principles of sequence of management of patients in family doctor outpatient department - in-patient department,
- indications for hospitalization
- conduct outpatient treatment of patients after their discharge from the hospital;
- evaluate the prognosis of life and performance of patients with the most common diseases;
- draw up medical documentation used by the family doctor;

Be able to:

- carry out prevention of the most common diseases;
- identify risk factors for a disease;
- assess the patient's health status and be able to monitor their health;
- draw up a patient's medical and social passport;
- analyze and draw up a program for the formation and preservation of individual and family health.

- diagnose incurable disease, terminal condition and its phases;
- diagnose and treat pain syndrome with a wide range of modern pain relief technologies;
- perform diagnostics and treatment of other debilitating symptoms (vomiting, shortness of breath, etc.) that accompany an incurable condition;
- calculate the dose of painkillers and write out appropriate prescriptions;
- keep records and store strong and narcotic drugs in accordance with the current legislation;
- carry out resuscitation measures for incurable patients;
- provide psychological support to terminally ill people and their loved ones during illness and during the period of grief;
- apply the rules of conduct with the deceased person in accordance with the current legislation;
- comply with bioethical and legal regulations when providing IPS;
- provide advice to incurable patients and their loved ones on medical and non-medical support during an incurable illness, including care, nutrition, social, legal or spiritual support, etc.;
- work in a multidisciplinary team;
- apply methods of preventing burnout syndrome and combating its consequences.

3. The content of the educational discipline

Content module 1.

Reform of primary medical care in Ukraine. Family doctor's role in modern healthcare system.

Theme 1. The place of Family Medicine in the overall structure of healthcare and the principles of family services for the population. Organization of the family doctor's work.

- Principles of organization of the existing primary medical care system and its disadvantages.
- Basic principles and advantages of the new primary medical care model.
- Expediency of transition from district-territorial medical care to family medicine.
- Principles of family services for the population - continuity of medical care.
- Basic accounting medical documentation in family medicine institutions.
- Main functions and content of the family doctor's work.
- Psychogenic, deontological aspects of the family doctor's activity.
- Structure of health insurance, activity of family doctor in the context of insurance medicine.
- Evidence-based medicine. Main provisions. Concept of randomized clinical research.
- Psychological aspects of family doctor's activity.

Theme 2. Medical and social aspects of public health. Examination of temporary and permanent disability. The role of a family doctor in promoting healthy lifestyle, prevention and medical examinations.

- Concept of health, intermediate state, and disease. Functional clinical syndromes in the practice of family doctor. Medical and social health passport;
- General principles of health promotion;
- Risk factors for diseases, their exacerbation and complications, and the fight against risk factors. Primary and secondary prevention;
- Modern views on prevention and medical examinations, taking into account the assessment of the individual's health status, age, gender and determination of risk factors;
- Indications for the treatment of patients in a day hospital;
- Concept of national and local management protocols for patients with various pathologies;
- Concept of medical rehabilitation;
- Examination of temporary and permanent disability.

- Fundamentals of information support for the work of the family doctor. Methods of distance learning.
- Methodological approaches to analyzing the activities of family doctor.

Content module2.

Organization of outpatient care for patients with the most common diseases and syndromes of therapeutic profile based on modern clinical protocols in the practice of family doctor.

Theme 3. Outpatient management programme for the patients with the most common diseases of the bronchopulmonary system (COPD, bronchial asthma). Risk factors, home monitoring, diagnosis of exacerbation, emergency care, indications for hospitalization.

- The importance of smoking, environmental, professional factors and infection in the development of chronic obstructive pulmonary disease.
- Classification of COPD.
- Clinical manifestations, data of laboratory and instrumental research methods depending on the stage (degree of severity).
- Differential diagnosis of COPD.
- Complications of COPD.
- Treatment of COPD. Primary and secondary prevention. Prognosis and working capacity.
- Etiology, pathogenesis of bronchial asthma (BA).
- BA classification.
- Clinical manifestations of BA, data of laboratory and instrumental research methods.
- Differential diagnosis of BA.
- Complications of BA.
- Treatment. Emergency care for an attack of bronchial asthma. Primary and secondary prevention. Prognosis and working capacity.

Theme 4. Diseases of the upper respiratory tract, differential diagnosis. Integrated management of patients. ARD, management of patients, differential diagnosis of exacerbations.

- Differential diagnosis of ARD.
- Principles of laboratory diagnosis, treatment and prevention of ARD.
- Indications for hospitalization,
- Medical assistance to patients at the pre-hospital stage.
- Detection of respiratory tuberculosis (active and passive). Risk groups. Additional examinations are also required. Indications for referral for consultation with a phthisiatrist.
- General principles of tuberculosis treatment. Organization of treatment in primary health care institutions. Prevention and treatment of adverse reactions to anti-TB drugs.

Theme 5. Outpatient management program for the patients with the most common diseases of the cardiovascular system. Hypertension: risk factors, blood pressure monitoring methods, uncomplicated and complicated hypertensive crises, emergency care, indications for hospitalization.

- Classification.
- Clinical manifestations and additional research methods.
- Damage of target organs.
- Differential diagnosis.
- Risk stratification.
- Complications.
- Treatment.
- Complicated and uncomplicated hypertensive crises, peculiarities of treatment tactics.

- Primary and secondary prevention.
- Prognosis and working capacity.
- Methods of research of the cardiovascular system
- Differential diagnosis of cardialgia.
- Intensive care in cardiology.

Theme 6. Somatoform autonomic dysfunction. Complaints, diagnosis, methods of treatment and rehabilitation.

- Concept of somatoform autonomic dysfunction. Etiology and pathogenesis.
- Classification.
- Characteristics of clinical syndromes.
- Diagnosis criteria.
- Differential diagnosis.
- Differentiated therapy.
- Primary and secondary prevention.
- Prognosis and working capacity.
- Differential diagnosis of dysphagia.
- Children health development and monitoring.

Theme 7. Management program for the patients with type 2 diabetes mellitus. Patient screening, glycemic control, treatment principles, indications for insulin therapy. Diabetic comas, pre-hospital care.

- Prediabetes. Criteria diagnostics. Prevention of type II diabetes. Recommendations for use Metformin.
- Gestational diabetes. Early screening for women with high-risk development of diabetes mellitus II. Recommendations nutritionist. Observation for pregnant women.
- Features therapy patients inclined age from comorbid pathology. Peculiarities of psychosomatics of the elderly patients, laboratory criteria, the course of type II diabetes with accompanying pathologies.
- Diabetes mellitus: definition concept, classification, etiopathogenesis. Concept insulin resistance. Clinical manifestations of type II diabetes.
- Diagnostic criteria for type II diabetes (oral test, glucose tolerance). Criteria compensation Glycosylated hemoglobin
- Self-control of glycemia. Means of self-control. Diary of self-control. Rules for working with a glucometer and accounting results.
- Treatment of type 2 diabetes. Hypoglycemic drugs.
- Diet therapy. Physical activity in type II diabetes.
- Hypoglycemia. Hyperglycemic states.
- Classification of diabetic coma.
- Chronic complications of type II diabetes (diabetic polyneuropathy, nephropathy, retinopathy).

Theme 8. Anemia, the most common symptoms, primary care examinations, treatment methods, and prophylaxis.

- Anemia. Definition. Etiological factors and pathogenesis Classification. General characteristics of a patient with anemia.
- Iron deficiency anemia (AID) and deficiency anemia vitamin B12 and folate acid. Characteristic signs. Diagnostic methods. Tactics of the doctor primary care.
- Other types of anemia. Differential diagnostics. Tactics of the doctor primary care.
- Peculiarities of clinic and laboratory diagnostics of various forms.

- Differential diagnosis.
- Complications.
- Treatment in patients with anemia, depending on the degree of severity and nature of the course of the disease.
- Transfusion of blood components and blood substitutes.
- Primary and secondary prevention.
- Prognosis and working capacity.

Content module 3.

Organization of emergency care at the pre-hospital stage in the practice of a family doctor.

Theme 9. Clinical classification of pain. Emergency care for the patients with pain syndrome in the practice of a family doctor.

- Classification of pain, differential diagnosis between somatic pain and neuropathic pain.
- Chest pain: differential diagnosis (acute coronary syndrome, pulmonary embolism, aortic aneurysm, spontaneous pneumothorax), patient management tactics at the prehospital stage.
- Differential diagnosis of acute abdominal syndrome.
- Headache (migraine).
- Renal colic, pre-hospital care.

Theme 10. Management program for patients with complaints of neck and back pain. Differential diagnosis. Pain syndrome associated with spinal pathology, patient management program.

- Definition and concepts of pain.
- Classification of pain.
- Algorithm for examination of patients with neck and back pain complaints.
- Characteristics of non-specific back pain.
- The role of a general practitioner - a family doctor in the organization of care for patients with dorsalgia.
- Methods of treatment of pain syndrome in the neck and back.

Theme 11. Organization of emergency medical care in case of sudden death at the pre-hospital stage in the practice of a family doctor.

- Sudden death rate in the overall mortality structure.
- Risk factors and causes.
- Signs of clinical and biological death.
- Causes of circulatory arrest. Additional research tools for determining the type of circulatory arrest.
- Methodology for providing assistance for the patients with cardiac arrest, primary respiratory arrest, and in case of traumatic death.
- Cardiopulmonary resuscitation technique (CPR).
- CPR performance criteria.

Theme 12. Organization of emergency medical care for the patients with convulsions and in case of the loss of consciousness at the pre-hospital stage in the practice of a family doctor.

- Classification of convulsions.
- General principles of management of patients with convulsive disorder. Features of providing aid for the patients with generalized and local convulsions.

- Classification of syncopal states.
- Providing emergency care for the patients with syncopal attack.

Theme 13. Organization of emergency medical care for the patients with sting injuries, bites, electrical injuries, in case of drowning and exposure to low and high temperatures at the pre-hospital stage.

- Types of bites, signs of anaphylactic reaction, first aid.
- Bites of venomous snakes, spiders, emergency care.
- Causes of electrical injuries, safety rules, emergency care
- Types of drowning, first aid.
- Frostbite: classification, clinic, first aid.
- Burns: methods for determining the burn area, degree, general principles of first aid.

Theme 14. Organization of medical care for incurable patients. Methods of palliative treatment of the main symptoms and syndromes of the patients with incurable diseases.

- Comprehensive approach to managing a patient with an incurable disease (psychological support, medical care, social counseling).
- Bedridden patient care, prevention of burnout syndrome.
- Treatment of chronic pain syndrome.
- Principles of cancer pain relief.
- Methods of prevention and treatment of concomitant symptoms and syndromes of the patients with incurable diseases.
- Etiology of HIV infection. Principles of laboratory diagnostics of HIV infection. Screening and verification studies.
- Counseling in the context of HIV infection. Voluntary testing with pre- and post-test counseling (VCT)
- Rules and methods for protecting health workers from HIV infection in the workplace. Medical post contact prevention.
- Organization of medical care for HIV-infected people. Care and psychological support for HIV-infected people. Symptomatic treatment and management of patients. Primary prevention of HIV infection. Organization of HIV prevention programs for various population groups.
- Principles of a multidisciplinary approach to working with incurable patients. Deontological aspects of communication with incurable patients and their relatives.

4. The structure of the educational discipline

Themes	Number of hours					
	Total	including				
		Lect.	Sem.	Pract. classes	Lab.	Independ. work
Content module1.						
Reform of primary medical care in Ukraine. Family doctor's role in modern healthcare system.						
Theme 1. The place of Family Medicine in the overall structure of healthcare and the principles of family services for the population. Organization of the family	16	0	0	2	0	14

doctor's work.						
Theme 2. Medical and social aspects of public health. Examination of temporary and permanent disability. The role of a family doctor in promoting healthy lifestyle, prevention and medical examinations.	10	0	0	2	0	8
<i>Total by content module 1</i>	26	0	0	4	0	22
Content module2.						
Organization of outpatient care for patients with the most common diseases and syndromes of therapeutic profile based on modern clinical protocols in the practice of family doctor						
Theme 3. Outpatient management program for the patients with the most common diseases of the bronchopulmonary system (COPD, bronchial asthma). Risk factors, home monitoring, diagnosis of exacerbation, emergency care, indications for hospitalization.	4	0	0	2	0	2
Theme 4. Diseases of the upper respiratory tract, differential diagnosis. Integrated management of patients. ARD, management of patients, differential diagnosis of exacerbations.	8	0	0	2	0	6
Theme 5. Outpatient management programs for the patients with the most common diseases of the cardiovascular system. Hypertension: risk factors, blood pressure monitoring methods, uncomplicated and complicated hypertensive crises, emergency care, indications for hospitalization.	10	0	0	2	0	8
Theme 6. Somatoform autonomic dysfunction. Complaints, diagnosis, methods of treatment and rehabilitation.	6	0	0	2	0	4
Theme 7. Management program for the patients with type 2 diabetes mellitus. Patient screening, glycemic control, treatment principles, indications for insulin therapy. Diabetic comas, pre-hospital care.	4	0	0	2	0	2
Theme 8. Anemia, the most common symptoms, primary care examinations, treatment methods, and prophylaxis.	2	0	0	2	0	0
<i>Total by content module 2</i>	34			12		22
Content module 3.						
Organization of emergency care at the pre-hospital stage in the practice of a family doctor.						
Theme 9. Clinical classification of pain. Emergency care for the patients with pain syndrome in the practice of a family doctor.	2	0	0	2	0	0
Theme10. Management program for	4	0	0	2	0	2

patients with complaints of neck and back pain. Differential diagnosis. Pain syndrome associated with spinal pathology, patient management program.						
Theme 11. Organization of emergency medical care in case of sudden death at the pre-hospital stage in the practice of a family doctor.	2	0	0	2	0	0
Theme 12. Organization of emergency medical care for the patients with convulsions and in case of the loss of consciousness at the pre-hospital stage in the practice of a family doctor.	2	0	0	2	0	0
Theme 13. Organization of emergency medical care for the patients with sting injuries, bites, electrical injuries, in case of drowning and exposure to low and high temperatures at the pre-hospital stage.	2	0	0	2	0	0
Theme 14. Organization of medical care for incurable patients. Methods of palliative treatment of the main symptoms and syndromes of the patients with incurable diseases	16	0	0	2	0	14
Total by content module 3	28	0	0	12	0	16
Grading test	2	0	0	2	0	0
Total hours	90	0	0	30	0	60

5. Themes of lectures / seminars / practical classes/ laboratories

5.1. Themes of lectures

Lectures are not provided.

5.2. Themes of seminars

Seminars are not provided.

5.3. Themes of practical classes

No.	Theme	Hours
Content module1.		
Reform of primary medical care in Ukraine. Family doctor's role in modern healthcare system.		
1.	Theme1. Practical class 1. The place of Family Medicine in the overall structure of healthcare and the principles of family services for the population. Organization of the family doctor's work.	2
2.	Theme2. Practical class 2. Medical and social aspects of public health. Examination of temporary and permanent disability. Practical class 3. The role of a family doctor in promoting healthy lifestyle, prevention and medical examinations.	2
Content module2.		
Organization of outpatient care for patients with the most common diseases and syndromes of therapeutic profile based on modern clinical protocols in the practice of family doctor		
3.	Theme3. Practical class 3. Outpatient management program for the patients with	2

	the most common diseases of the bronchopulmonary system (COPD, bronchial asthma). Risk factors, home monitoring, diagnosis of exacerbation, emergency care, indications for hospitalization.	
4.	Theme4. Practical class 4. Diseases of the upper respiratory tract, differential diagnosis. Integrated management of patients. ARD, management of patients, differential diagnosis of exacerbations.	2
5.	Theme5. Practical class 5. Outpatient management program for the patients with the most common diseases of the cardiovascular system. Hypertension: risk factors, blood pressure monitoring methods, uncomplicated and complicated hypertensive crises, emergency care, indications for hospitalization.	2
6.	Theme6. Practical class 6. Somatoform autonomic dysfunction. Complaints, diagnosis, methods of treatment and rehabilitation.	2
7.	Theme7. Practical class 7. Management program for the patients with type 2 diabetes mellitus. Patient screening, glycemic control, treatment principles, indications for insulin therapy. Diabetic comas, pre-hospital care.	2
8.	Theme8. Practical class 8. Anemia, the most common symptoms, primary care examinations, treatment methods, and prophylaxis.	2
Content module 3.		
Organization of emergency care at the pre-hospital stage in the practice of a family doctor.		
9.	Theme9. Practical class 9. Clinical classification of pain. Emergency care for the patients with pain syndrome in the practice of a family doctor.	2
10.	Theme10. Practical class 10. Management program for patients with complaints of neck and back pain. Differential diagnosis. Pain syndrome associated with spinal pathology, patient management program.	2
11.	Theme11. Practical class 11. Organization of emergency medical care in case of sudden death at the pre-hospital stage in the practice of a family doctor.	2
12.	Theme12. Practical class 12. Organization of emergency medical care for the patients with convulsions and in case of the loss of consciousness at the pre-hospital stage in the practice of a family doctor.	2
13.	Theme13. Practical class 13. Organization of emergency medical care for the patients with sting injuries, bites, electrical injuries, in case of drowning and exposure to low and high temperatures at the pre-hospital stage.	2
14.	Theme14. Practical class 14. Organization of medical care for incurable patients. Methods of palliative treatment of the main symptoms and syndromes of the patients with incurable diseases.	2
15.	Grading test	2
	Total:	30

5.4. Themes of laboratories

Laboratories are not provided.

6. Independent work of the student

No.	Theme	Hours
Content module1.		
Reform of primary medical care in Ukraine. Family doctor's role in modern healthcare system.		
1.	Structure of health insurance, activity of family doctor in the context of insurance medicine.	4
2.	Evidence-based medicine. Main provisions. Concept of randomized clinical research.	4
3.	Psychological aspects of family doctor's activity.	4
4.	Medical and social aspects population' health.	2

5.	Fundamentals of information support for the work of the family doctor. Methods of distance learning.	4
6.	Methodological approaches to analyzing the activities of family doctor.	4
Content module2.		
Organization of outpatient care for patients with the most common diseases and syndromes of therapeutic profile based on modern clinical protocols in the practice of family doctor		
7.	Outpatient management program for the patients with the most common diseases of the bronchopulmonary system (COPD, bronchial asthma).	2
8.	Detection of respiratory tuberculosis (active and passive). Risk groups. Additional examinations are also required. Indications for referral for consultation with a phthisiatrist	4
9.	General principles of tuberculosis treatment. Organization of treatment in primary health care institutions. Prevention and treatment of adverse reactions to anti-TB drugs.	2
10.	Methods of research of the cardiovascular system	2
11.	Outpatient management program for the patients with the most common diseases of the cardiovascular system.	2
12.	Differential diagnosis of cardialgia.	2
13.	Intensive care in cardiology.	2
14.	Differential diagnosis of dysphagia.	2
15.	Children health and development monitoring	2
16.	Management program for the patients with type 2 diabetes mellitus.	2
Content module 3.		
Organization of emergency care at the pre-hospital stage in the practice of a family doctor		
17.	Management program for patients with complaints of neck and back pain.	2
18.	Etiology of HIV infection. Principles of laboratory diagnostics of HIV infection. Screening and verification studies.	4
19.	Counseling in the context of HIV infection. Voluntary testing with pre- and post-test counseling (VCT)	2
20.	Rules and methods for protecting health workers from HIV infection in the workplace. Medical post contact prevention.	2
21.	Organization of medical care for HIV-infected people. Care and psychological support for HIV- infected people. Symptomatic treatment and management of patients. Primary prevention of HIV infection. Organization of HIV prevention programs for various population groups.	4
17.	Principles of a multidisciplinary approach to working with incurable patients. Deontological aspects of communication with incurable patients and their relatives.	2
	Total:	60

7. Teaching methods

Practical classes: conversation, solving clinical situational tasks, practicing patient examination skills, training and practicing skills on simulation models, training exercises on differential diagnosis of the most common diseases.

Independent work: independent work with the textbook, independent work with additional sources of information, independent solution of clinical tasks.

8. Forms of control and evaluation methods (including criteria for evaluating learning outcomes)

Ongoing control: oral survey, testing, evaluation of performance of practical skills,

evaluation of communication skills during role-play, solution of situational clinical tasks, evaluation of activity in class.

Final control: Grading Test.

Evaluation of the current educational activity in a practical session:

1. Evaluation of theoretical knowledge on the subject of the lesson:
 - methods: survey, solving a situational clinical problem
 - maximum score – 5, minimum score – 3, unsatisfactory score – 2.
 2. Evaluation of practical skills and manipulations on the subject of the lesson:
 - methods: assessment of the correctness of the performance of practical skills
 - maximum score – 5, minimum score – 3, unsatisfactory score – 2.
 3. Evaluation of work with the patient on the subject of the lesson:
 - methods: assessment of: a) communication skills of communicating with the patient and his parents, b) the correctness of prescribing and evaluating laboratory and instrumental studies, c) compliance with the differential diagnosis algorithm, d) substantiation of the clinical diagnosis, e) drawing up a treatment plan;
 - maximum score – 5, minimum score – 3, unsatisfactory score – 2.
- The grade for one practical lesson is the arithmetic average of all components and can only have a whole value (5, 4, 3, 2), which is rounded according to the statistical method.

Criteria of ongoing assessment at the practical class

Score	Assessment criterion
«5»	The student has a fluent command of the material, takes an active part in discussing and solving a situational clinical problem, confidently shows practical skills during interpreting laboratory research data, expresses his opinion about the lesson, and shows clinical thinking.
«4»	The student has a good command of the material, takes part in the discussion and solution of a situational clinical problem, demonstrates practical skills while making some mistakes, expresses his opinion about the lesson, and shows clinical thinking.
«3»	The student education does not have enough knowledge of the material, is unsure of participating in the discussion and solving the situational clinical problem, and shows practical skills with significant errors.
«2»	The student does not possess the material, does not take part in the discussion and solution of the situational clinical problem, and does not show practical skills.

Grading Test is considered, if the student has completed all the tasks of the working program of the educational discipline. The student has an average current rating of at least 3.0 and has no academic debt.

Evaluation of learning results during the final control

The content of the evaluated activity	Scores
Solving a clinical situational task with evaluation of laboratory and instrumental research.	1
Answers to 1 theoretical questions	2
Answers to 2 theoretical questions	2

Criteria for evaluating the learning outcomes of student on grading test

Score	Assessment criterion
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Excellent «5»	The student correctly, accurately and completely performed all tasks of the final control, clearly and logically answered the questions. Thoroughly and comprehensively knows the content of theoretical issues, fluent in professional and scientific terminology. Thinks logically and constructs an answer, freely uses acquired theoretical knowledge when analyzing practical tasks. When solving a clinical task, he correctly interpreted the anamnesis data, the results of clinical, laboratory and instrumental analyses, answered all the questions correctly and convincingly substantiated his point of view, could propose and justify an alternative version of the decision on individual issues.
Good «4»	The student completed all tasks of the final control sufficiently fully, answered the questions clearly and logically. He knows the content of theoretical issues deeply and comprehensively, and has professional and scientific terminology. Thinks logically and constructs an answer, uses acquired theoretical knowledge when analyzing practical tasks. But during the explication of some questions, there is not enough depth and argumentation, makes insignificant mistakes, which are eliminated by the student himself when the teacher points them out. When solving a clinical problem, he assumed insignificant errors or inaccuracies in the interpretation of anamnesis data, the results of clinical, laboratory and instrumental analyses, answered all the questions without significant errors, fully substantiated his point of view, but the proposal of an alternative option caused difficulties.
Satisfactory «3»	The student incompletely fulfilled all the tasks of the final control, the answers to additional and leading questions are vague. Possesses a basic amount of theoretical knowledge, uses professional and scientific terminology inaccurately. Experiences significant difficulties in constructing an independent logical answer, in applying theoretical knowledge in the analysis of practical tasks. There are significant errors in the answers. When solving a clinical problem, he interpreted the anamnesis data, the results of clinical, laboratory and instrumental studies with errors, did not know individual details, allowed inaccuracies in the answers to questions, did not sufficiently justify his answers and interpret the wording correctly, experienced difficulties in completing tasks and offering alternative options.
Unsatisfactory «2»	The student education did not complete the task of the final control, in most cases he did not answer the additional and leading questions of the teacher. He did not master the basic amount of theoretical knowledge, he showed a low level of mastery of professional and scientific terminology. Answers to questions are fragmentary, inconsistent, illogical, cannot apply theoretical knowledge when analyzing practical tasks. There are a significant number of gross errors in the answers. When solving a clinical problem, he could not interpret the received data from the anamnesis, the results of clinical, laboratory and instrumental studies, answer the questions, or made significant mistakes in the answers; could not justify his decisions or did it unconvincingly. He did not offer alternative options.

9. Distribution of points, obtained by the student

The grade for the discipline consists of 50% of the grade for current academic performance and 50% of the grade for differential credit.

The average grade in the discipline is converted to the national grade and converted to points on a multi-point scale (200-point scale).

Conversion of traditional assessment into 200-point is carried out by the information and technical department of ONMedU by the special program by the formula:

$$\text{Average score (current academic performance)} \times 40.$$

Conversion table of traditional to multi-point

National score for the discipline	The sum of scores for the discipline
Excellent («5»)	185 – 200
Good («4»)	151 – 184
Satisfactory («3»)	120 – 150
Unsatisfactory («2»)	Less than 120

According to the ECTS rating scale, students' achievements in educational discipline, who study on the same course of one specialty, according to their scores, are assessed by means of rank, namely:

Conversion of the traditional evaluation and and ECTS scores

Score on the ECTS scale	Statistical indicator
A	The best 10% students
B	Next 25% students
C	Next 30% students
D	Next 25% students
E	Next 10% students

10. Methodological support

- Working program in the discipline
- Syllabus
- Methodological recommendations for the practical classes in the discipline
- Methodological recommendations for the individual work of students
- Multimedia presentations
- Situational tasks (including calculation)
- Tests on the theme

11. Questions for the final control

1. Subject and tasks of family medicine. Principles of family medicine.
2. Functions and content of family doctor's work.
3. Family doctor's working day.
4. The concept of medical examination in family medicine.
5. Purpose and objectives of screening in family medicine.
6. The concept of health, intermediate state, disease. Types of prevention (primary, secondary, tertiary). Principles of risk factors correction.
7. Screening, prevention, and risk factors for Type 2 diabetes in the practice of a family doctor.
8. Cancer screening in the practice of a family doctor.
9. Providing medical care in day hospitals, organizing a hospital at home.
10. The concept of examination of temporary disability. Insurance history.
11. Procedure for issuing documents certifying disability. Deadlines.
12. Procedure for referral to the medical and social expert commission.
13. Contraindications to referral of adults for spa treatment.
14. Pathogenesis and clinical manifestations of hymenopteran bites and sting injuries.
15. Stages of emergency care for hymenopteran bites and sting injuries. Emergency care for anaphylactic shock.
16. Clinical manifestations and emergency care for snake bites.
17. Clinical manifestations and emergency care for arachnid bites.
18. Preventive measures and emergency care for tick bites.

19. Providing emergency care in case of jellyfish injuries.
20. Algorithm and stages of emergency care in case of heat stroke.
21. Classification and criteria for determining the severity of burns, indications for hospitalization.
22. Providing emergency care for burns.
23. Providing emergency care for general cold trauma and frostbite, indications for hospitalization.
24. Skin manifestations of drug allergies. Stages of emergency care. Examination of disability in case of drug allergies.
25. List of medical indications and contraindications for palliative care.
26. Indications for managing palliative patients at home, organizing a hospital at home.
27. Indications for hospitalization of palliative patients in a hospital, definition of a hospice.
28. WHO three-stage scheme for the treatment of chronic pain syndrome.
29. Prevention and treatment of pressure sores, stages of development.
30. Rules for writing prescriptions for medicines containing narcotic drugs or psychotropic substances.
31. Rules for storage, issuance and return of narcotic drugs, psychotropic substances and precursors in healthcare institutions of Ukraine.
32. Adjuvant drugs in the treatment of chronic pain syndrome in palliative patients.
33. Procedure for issuing documents certifying temporary disability in connection with caring for a sick family member.
34. Recommendations for palliative patient care.
35. Basic principles of pain management and the main drugs used to treat pain.
36. Differential diagnosis of chest pain. Family doctor's tactics.
37. Differential diagnosis of abdominal pain. Pseudoabdominal syndrome. Family doctor's tactics.
38. Differential diagnosis of headache. Family doctor's tactics.
39. Differential diagnosis of back pain (dorsalgia). Family doctor's tactics.
40. Tactics of a family doctor for renal colic.
41. Differential diagnosis of convulsive syndrome.
42. Tactics of managing a patient with convulsive syndrome in the practice of a family doctor.
43. Differential diagnosis of syncopal conditions.
44. Tactics of managing a patient with syncopal states in the practice of a family doctor.
45. Differential diagnosis of bronchial obstructive syndrome at the outpatient stage.
46. Emergency care for bronchial obstructive syndrome in adults and children.
47. Principles of treatment of acute respiratory viral infections in the practice of a family doctor.
48. Principles of treatment and indications for outpatient treatment of pneumonia in adults.
49. Pneumonia in children. Family doctor's tactics.
50. Screening of hypertension in the practice of a family doctor. Classification and significance of hypertension risk factors.
51. Providing emergency care for the patients with an uncomplicated hypertensive crisis.
52. Providing care for a complicated hypertensive crisis at the prehospital stage in the practice of a family doctor.
53. Tactics of a family doctor in case of an attack of atrial fibrillation at the outpatient stage.
54. Tactics of a family doctor in case of angina attack. Differential diagnosis of acute coronary syndrome and tension angina.
55. Tactics of a family doctor in case of acute coronary syndrome at the prehospital stage.
56. Sudden death syndrome in the practice of a family doctor. Prevention.
57. Principles of rehabilitation of stroke patients.
58. Principles of rehabilitation of patients who have suffered a heart attack.
59. Routine vaccination according to the vaccination calendar in Ukraine. Contraindications to vaccination.
60. Measles. Diagnosis, treatment, and prevention.

61. Diphtheria. Diagnosis, treatment, and prevention.

12. Recommended literature**Basic:**

1. Essentials of Family Medicine, Philip D Sloane, Lisa M Slatt, Mark H Ebell, Louis B Jacques, Mindy A Smith/ 2017/ ISBN-10 / ASIN: 0781781884 ISBN-13 / EAN: 9780781781886 Lippincott Williams & Wilkins
2. Current Diagnosis & Treatment in Family Medicine Jeannette E. South-Paul, Samuel C. Matheny, Evelyn L. Lewis/2018/, ISBN: 0-07-151004-4 McGrawHill Medical.
3. The Color Atlas and Synopsis of Family Medicine, 3rd Edition by Richard Usatine , Mindy Ann Smith , E.J. Mayeaux, Heidi Chumley, 1680 pages,/ 2018/ ISBN-10 : 1259862046 ISBN-13 : 978-1259862045 McGraw-Hill Education
4. Family Medicine: Ambulatory Care and Prevention, Sixth Edition (Lange Clinical Manuals) 6th Edition Mindy A. Smith, MD (East Lansing, MI), Leslie A. Shimp, PharmD, MS (Ann Arbor, MI), Sarina Schragar, MD, MS (Madison, WI) 1088 pages /2020/ ISBN-10: 0071820736 ISBN-13: 978-0071820738 McGraw-Hill Education
5. Textbook of Family Medicine 9th Edition by Robert E. Rakel MD , David Rakel MD ,1215 pages,/2015/, ISBN-13 : 978-0323239905 ISBN-10: 0323239900 Saunders; 9th Edition (March 6, 2020).

II Additional

1. CHEP guidelines <http://guidelines.hypertension.ca/>
2. CDA guidelines <http://guidelines.diabetes.ca/fullguidelines>
3. COPD evaluation/management based on GOLD guidelines <http://goldcopd.org/gold-reports/>
4. CPG's CFPC link <http://www.cfpc.ca/clinicalpracticeguidelines/>
5. Best Advice Guide: Health Literacy in the Patient's Medical Home <http://patientsmedicalhome.ca/resources/best-advice-guides/best-advice-guide-health-literacypatients-medical-home>

13. Electronic information resources

1. American College of Cardiology <http://www.acc.org/>
2. American Heart Association <http://news.heart.org/>
3. European Society of Cardiology <http://www.escardio.org/>
4. National Comprehensive Cancer Network <https://www.nccn.org/>
5. The European Society for Medical Oncology <http://www.esmo.org/>
6. Up To Date <http://www.uptodate.com>
7. BMJ Clinical Evidence <http://clinicalevidence.bmj.com>
8. Medscape from WebMD <http://www.medscape.com>
9. National Guideline Clearinghouse <https://www.guideline.gov/>
10. Centers for Disease Control and Prevention (CDC) <https://www.cdc.gov/>
11. The Cochrane Collaboration The Cochrane Library <http://www.cochrane.org/>
12. Clinical Knowledge Summaries (CKS) <http://prodigy.clarity.co.uk/>
13. Official website of the Ministry of Health - Ukraine <https://moz.gov.ua/>
14. Official website of the European Society of General Practice/Family Medicine, (WONCA – Wonca Europe) <https://www.woncaeurope.org/>
15. Official website of the Ministry of Health of Ukraine. Guidelines for primary care Duodecim Medical Publications Ltd. <https://guidelines.moz.gov.ua/>

16. The New England Journal of Medicine. URL: <https://www.nejm.org/about-nejm/products-and-services>