## Odessa National Medical University International Faculty Internal Medicine #2 Department

## **Syllabus**

## **Outpatient Medical Practice "Internal Medicine"**

Credit hours	38 h (1,25 credit)		
Semester,	IX–X		
year	5		
Days,	Monday – Friday		
time,	6,4 acad. hours, from 13.00 to 17.48		
place			
place	Center of Reconstructive and Restorative Medicine (University clinic) ONMedU, Department of Internal Diseases, non-profit		
	organizations that provides Ambulatory Medical Care of the 1 <sup>st</sup>		
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Tutors	and 2d levels and approved by the Order of Rector of ONMedU.		
101015	The Head of the Department: Shtanko Vasyl Andriyovych,		
	Штанько Василь Андрійович, PhD, associate professor.		
	<b>Professor of the Department:</b> Tykhonova Susanna Adolfivna,		
	Doctor of Medical Science, professor.		
	Associate professors of the Department: Khyzhnyak Olena Volodymirivna, PhD; Kholopov Leonid Semenovich, PhD;		
	Iablonska Victoriia Borysivna, PhD. Assistants: Tofan Natalia Victorivna, PhD; Demydenko		
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	Center of Reconstructive and Restorative Medicine (University		
Working place	clinic) ONMedU,		
	4-th floor: Department of Internal Diseases: rooms №№ 24a-b, 25, 30, 31, 35a, 35b (methodical); lecture room;		
	Ground floor – associate professor's room;		
	1-st floor: 3 study rooms and 1 room for practical skills		
Consultation	mastering.		
Consultation	Face-to-face: Monday Eriday from 14.20 to 16.00 Saturday from 00.00 to		
	Monday –Friday, from 14.30 to 16.00, Saturday from 09.00 to		
	13.00.		
	On-line: Monday –Friday from 09.00 to 16.00 (the tutor of the group determines the time and student's quantity that can clear		
	group determines the time and student's quantity that can clear		
	academic dept and receive consultation).		

### **COMMUNICATION**

Off-line in Department's rooms during practical lessons and Differential test, on-line in Microsoft Teams, in some cases – in ZOOM and Viber/Telegram.

#### **COURSE ANNOTATION**

**The subject** of Discipline «Outpatient Medical Practice – Internal Medicine» on 5<sup>th</sup> course (OMP5) is learning prevention, diagnostic, treatment and emergency care in clinics of Internal Medicine (IM) at ambulatory conditions.

## **Pre-requisites of the course**

Discipline OMP5 is based on student's knowledge from IM according to study plan of 4-5 courses, propaedeutics of IM and pediatrics, general surgery and fundamental disciplines (human anatomy, physiology and patophysiology, microbiology, virusology and immunology, radiology and pharmacology).

### **Post-requisites of the course**

Acquired knowledge, skills and competences are the framework for further study on 6-th course IM, emergency medicine, surgery, pediatrics and infectious diseases and are the basis for continuous professional post-graduate education.

**Aim of the course:** establish and develop decision-making ability in 5-th year students by managerial skills of modern Medical Practice methods and organizational forms at Ambulatory Medical Care of the 1<sup>st</sup> and 2d levels.

### Tasks for OMP5 discipline are to acquire next skills and competencies:

- 1. To form practical skills necessary for independent work in the conditions and on places of outpatient medical care to patients of the 1st and 2nd levels in the role of the assistant of the general practitioner - the family doctor, the doctorspecialist of a therapeutic profile.
- 2. To increase the amount of theoretical knowledge on the organization of medical care of therapeutic profile at the outpatient stage, in particular the basic principles of reforming the organization of medical care to the population of Ukraine, certain issues of therapy, diagnostic methods of examination.
- 3. To form and consolidate the skills and abilities to keep current medical records in the conditions of the family doctor's outpatient clinic and the consultativediagnostic centre of the polyclinic.
- 4. Provide knowledge on the general principles of expert assessment of temporary and permanent disability;
- 5. Acquire knowledge about the system of continuous prevention of diseases of internal organs within the competence and responsibilities of a general practitioner family doctor and therapeutic specialists;
- 6. To deepen the knowledge about the diagnosis and treatment of internal diseases in the context of outpatient care, the principles of rehabilitation of patients and indications / contraindications to refer patients for spa treatment.
- 7. To practice practical skills and ability to provide outpatient care in emergencies in the clinic of internal medicine;
- 8. Develop and consolidate the skills of managing critically ill, incurable patients, and planning treatment and care.
- 9. To form and consolidate in students the skills of promoting a healthy lifestyle

among the population as a method of primary disease prevention through the widespread use of health education.

## **Outcome results:**

As a result of mastering OMP5 discipline content students must:

- know:

- 1. Etiology, risk factors of development and progression of internal organs diseases.
- 2. Main principles of treatment of internal organs diseases which should be evidence based
- 3. Basics of primary and secondary prophylaxis of internal organs diseases.
- 4. Basics of clinical pharmacology of the drugs, which are used for internal organs diseases treatment, first of all prognosis-modifying drugs.

## - be able to:

- 1. Communicate with patient and his relatives, to perform clinical examination of a patient with diseases of the internal organs in an outpatient setting to collect data on patient complaints, medical history, life history.
- 2. Evaluate information on the diagnosis based on the results of laboratory and instrumental studies. Determine the list of necessary clinical, laboratory and instrumental studies and evaluate their results.
- 3. Identify the leading clinical symptom or syndrome. Establish a most probable or syndromic diagnosis of disease. Assign laboratory and instrumental examination of patient.
- 4. Make a differential diagnosis of internal organs diseases. Determine preliminary and clinical diagnosis of the disease.
- 5. To determine the principles of treatment of major diseases of internal organs in an outpatient setting, the required mode of work and rest, the nature of nutrition.
- 6. Diagnose emergency states.
- 7. Define tactics and provide emergency medical care.
- 8. Perform medical manipulations.
- 9. To carry out examination of working capacity.
- 10. Maintain medical records.

## **COURSE DESCRIPTION**

## Forms of learning

Course of OMP5 contains practical lessons (8 academic hours) and independent student work (30 academic hours).

Each student during the IMP together with a general practitioner - family medicine or a specialist in therapeutic profile outpatient reception of patients. During this reception, the student conducts / participates in the survey and physical examination of patients, establishing a preliminary diagnosis, prescribing treatment, determining the need for patient consultation with specialists and preparation of medical records. In case of necessary additional examinations of the patient in the offices of functional diagnostics, consultations of related specialists, the student accompanies the patient and takes an active part in conducting a certain study (in particular, ECG).

## Forms of work performance during OMP5

Get acquainted with the main responsibilities and professional activities of a general practitioner - family medicine, a specialist in the consulting and diagnostic centre of the clinic.

To get acquainted with the principles of organization of planned and urgent therapeutic care in the outpatient clinic of a family doctor (primary health care centre), a physician-therapist and specialists-specialists of therapeutic profile.

To work as an assistant to a family doctor, a physician-therapist and physicians-specialists of therapeutic profile.

Work in the office of functional diagnostics: recording and analysis of ECG in myocardial infarction, arrhythmias and conduction of the heart; participation in echocardiographic examination with clinical interpretation of results.

Work in diagnostic rooms: analyze and interpret computed tomography data, X-ray examinations of the chest and abdomen; sonography of abdominal organs, fibrogastroduodenoscopy, colonoscopy.

Work in the physiotherapy room: participate in the procedures of electrotherapy with direct current, pulsed currents of low and sound frequency, high-frequency electrotherapy, magnetic therapy, aeroionotherapy, ultrasound therapy, heat and hydrotherapy procedures, etc. (in the presence).

Work in specialized (cardiology, etc.) offices.

To be on duty in the office of emergency care in the polyclinic: to examine patients, to determine the leading syndromes in emergency situations; participate in the provision of emergency care in emergencies: acute heart failure, hypertensive crisis, paroxysmal heart rhythm disorders, MES syndrome, pulmonary embolism, acute renal failure, etc.

## Content of learning subject

Theme 1. Principles of organization of planned and urgent therapeutic care in Ukraine. Structure and organization of work of the centre of primary medical care and consultative-diagnostic centre, volume and forms of work of the general practitioner - family medicine, doctor-therapist, doctor-specialist of therapeutic profile. Practical work in the profiling (therapeutic) departments.

Theme 2. Basic documentation in the work of a family doctor, a doctorspecialist of therapeutic profile. Methods of encrypting diagnoses. Electronic document management system in the practice of a family doctor. Practical work in the profiling (therapeutic) departments.

Theme 3. Principles and organization of examination of temporary and permanent disability. Indications, rules of registration and issuance of letters of incapacity (including electronic), the average length of stay on the list of incapacity for work in the most common diseases of the internal organs. Practical work in the profiling (therapeutic) departments.

Theme 4. Rules of registration of emergency notifications about infectious patients, the list of infectious diseases for which emergency notifications are issued.

Rules for completing and issuing a medical death certificate. Practical work in the profiling (therapeutic) departments.

Theme 5. Recommendations on technology measurement of blood pressure by the method of Korotkov (according to the Order of the Ministry of Health of Ukraine №384 from 24.05.2012 and European recommendations in 2018). Methods of home monitoring of blood pressure. Daily outpatient monitoring of blood pressure. Practical work in the profiling (therapeutical) departments.

Theme 6. Organization and algorithms of outpatient emergency care in major emergencies in the clinic of internal medicine. Practical work in the profiling (therapeutic) departments.

Theme 7. Principles of ethics and deontology in the practice of general practitioner-family medicine. Practical work in profile (therapeutic) departments.

Theme 8. Organization of planned and urgent medical care at primary (outhospital) and secondary (hospital) levels. Auditory work at the Internal Medicine #2 Department.

Theme 9. Algorithms of emergency care in a clinic of internal diseases in ambulatory conditions. Auditory work at the Internal Medicine #2 Department.

## **Recommended Books**

**Basic:** 

- 1. Hutchison's Clinical Methods, 24<sup>th</sup> ed. Editors: Glynn M., Drake M.W.-Elsevier, 2018. – 465 p.
- 2. Davidson's Principles and Practice of Medicine 23rd Edition. Editors: Stuart Ralston, Ian Penman, Mark Strachan Richard Hobson. Elsevier. 2018. 1440p.
- **3.** Handbook of Liver Disease, 4<sup>th</sup> ed. Editors: Friedman L.S., Martin P. Elsevier, 2018. 512 p.
- **4.** Kelley's Textbook of Rheumatology. 10th ed. Philadelphia, Pa: Saunders Elsevier; 2014
- Kidney Disease: Improving Global Outcomes (KDIGO) CKD Work Group. KDIGO 2012 Clinical Practice Guideline for Acute Kidney Injury // Kidney inter. - 2012. - Suppl. 2. – P. 19-37, 42-69, 89-116.
- **6.** From the Global Strategy for the Diagnosis, Management and Prevention of COPD, Global Initiative for Chronic Obstructive Lung Disease (GOLD) 2020. Available from: goldcopd.org.
- 7. GINA report, global strategy for asthma management and prevention. Updated 2020. <u>http://www.ginasthma.org/documents/4</u>
- BSACI guideline for the management of chronic urticaria and angioedema // Clinical & Experimental Allergy. – 2015 - Vol.45. – P. 547-565.
- **9.** 2018 ESC Guidelines for the diagnosis and management of syncope // European Heart Journal. 2018. Vol. 39, Issue 21. P.1883–1948.
- **10.**2018 ESC Guidelines for the management of patients with ventricular arrhythmias and the prevention of sudden cardiac death DOI:

http://dx.doi.org/10.1093/eurheartj/ehv316

- 11.ESC Guidelines for the management of acute myocardial infarction in patients presenting with ST-segment elevation: The Task Force for the management of acute myocardial infarction in patients presenting with ST-segment elevation of the European Society of Cardiology // European Heart Journal. – 2018. Vol. 39, Issue 2. – P.119-177.
- **12.**ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure: The Task Force for the diagnosis and treatment of acute and chronic heart failure // European Heart Journal. 2018. Vol. 37, Issue 27. P. 2129–2200.
- **13.**2020 ESC Guidelines for the management of atrial fibrillation developed in collaboration with EACTS

## Additional literature:

- 14.ЕКГ у практиці=The ECG in Practice=ЭКГ в практике: Навч. посіб. для мед. ун-тів, інст., акад. Рекомендовано Вченою радою ІваноФранківського НМУ / Джон Р. Хемптон; за участю Девіда Едлема. К., 2018. 560 с., тримовне кольор. вид. (англ., укр., рос.)
- 15.Order of the Ministry of Health of Ukraine from №1269 from 05.06.2019 "On approval and implementation of medical and technological documents for standardization of emergency medical care", "EMERGENCY MEDICAL CARE: PREHOSPITAL STAGE. NEW CLINICAL PROTOCOL ".
- **16.**Order of the Ministry of Health of Ukraine dated 05.06.2020 № 1311 "On approval of the Model table of equipment of structural units of the emergency medical care system".
- **17.**ORDER of the Ministry of Health of Ukraine №13 from 04.01.2018 "On some issues of application of the Ukrainian version of the International Classification of Primary Health Care (ICPC-2-E)".
- **18.**Internal Medicine: Rheumatology: Textbook. way. for medical students. University software. Recommended by the Ministry of Health / V.Ye. Kondratyuk, M.5. Juice. - K., 2017. - 272 c.
- **19.**Emergency medicine: Emergency (ambulance) medical care: a textbook (University IV. A.) / I.S. Zozulya, V.I Bobrova, GG Roschin and others; for order. I.S. Cuckoos. 3rd ed., Revised. and additions, Publisher: All-Ukrainian specialized publishing house "Medicine", 2017. 960 p. (ISBN: 978-617-505-462-8).

## Informational electronic resources:

https://guidelines.moz.gov.ua/documents; http://www.ers-education.org/guidelines.aspx https://ehaweb.org http://www.gastro.org/guidelines www.ginasthma.org http://goldcopd.org. https://www.nice.org.uk https://www.oxfordmedicaleducation.com/

#### https://www.ueg.eu/guidelines/

#### Informational supply:

Electronic library of ONMedU: links to methodical guidelines for lectures and practical lessons, methodical recommendations.

Repositorium of ONMedU: scientific journals, abstracts of dissertations.

### **EVALUATION**

#### Methods of current control:

The student records the work done during the day in a diary, this information is confirmed by the student's signatures and the leader's signature from the Department.

Upon completion of MP5, the student fills out a consolidated report on the work performed, which is part of the Diary. The report should contain information about the student's performance of all sections of the MP5 program and individual task, a list of references. The report is issued according to the form approved by the Department of Internal Medicine No2. The report is checked and approved by practice leaders from the Department of Internal Medicine No2.

Evaluation of the success of the study is performed on a traditional 4-point scale. The current performance is calculated as the average current score, ie the arithmetic mean of all grades obtained by the student on a traditional scale, rounded to 2 (two) decimal places.

## Forms and methods of final control:

Final control of MP5 is made as a differential test (DT) which is taken by students in the last day of practice. This day is determined by study plan/study schedule. The general and special competencies acquired by the student, the content and quality of keeping the Diary and the completeness of the internship program are assessed according to the quantitative indicators of the consolidated report. Program learning outcomes are assessed through interviews (oral interviews, solving clinical situational problems).

The presence of a completed and certified by the head of practice Diary, report and average grade not less then 3.00 is a prerequisite for admission of the student to the DT.

DT performance is standardized and includes control of theoretical and practical preparation. The student can make a DT to the head of the practice or (at the request of the student / on behalf of the head of study work / head of the department) the head of the department, professor or one of the associate professors of the department.

#### How knowledge evaluation will be performed for students?

The total mark for the discipline is calculated as follows: on a 4-point traditional (national) scale, the average score for the discipline is first calculated as the arithmetic mean of the two components:

- the average current score as the arithmetic of all current scores (calculated as a number rounded to 2 (two) decimal places;
- traditional grade for the exam.

The average score for the discipline is translated into the traditional grade from the discipline on a 4-point scale and is regarded as the ratio of this arithmetic mean to the percentage of mastering the required amount of knowledge in this subject.

Therage grade of success (current/from discipline) x +0		
Traditional assessment	Balls	
5	185-200	
4	151-184	
3	120-150	

Average grade of success (current/from discipline) x 40

**Conversion of traditional assessment of the discipline on a multi-point scale** is performed by inform digital centre of ONMedU.

## Independent students work (ISW)

Includes out- and in-auditorium preparation of students, work in departments of medical institution. Leader of practice provides a possibility for ISW and during DT controls and assesses its performance. Additional control for ISW is made during check of report of MP5 and diary

## **COURSE POLICIES**

## Policies concerning deadlines and reexamination

According to study plan of ONMedU there is a schedule of DT passing and DT retake. DT of MP5 is taken by students on the last day of practice, which is determined by study plan/curriculum. Students who for good reasons did not show up at DT an additional day for retake is given, the date of which is determined by the educational department of ONMedU.

## Policies for academic honesty.

Violation of academic honesty is not allowed while working on writing papers, preparation for reports, etc. If Internet resources or other sources of information were used student should indicate the source which have been used during the task.

All written works are checked for plagiarism and accepted for evaluation with correct text borrowings not more than 20%. If plagiarism is detected, the student receives an unsatisfactory mark for the task and must retake the task.

Cheating during DT is forbidden (including those with usage of mobile devices).

## Policies for attendance and being late

Attendance of lessons and work in a medical institution within an established time is a mandatory part of discipline study completeness assessment. For objective reasons (for example illness, epidemic situation, international internship) study can be hold distantly after alignment with chef of department and dean. One should present completed tasks according to the study plan during consultation with a teacher.

All the tasks provided for the program must be completed on time in accordance with the schedule.

A student who is late is considered as that one who has missed classes for a disrespectful reason. His answer on the lesson's topic will be assessed in additional hours of academic debt rework. He has right to be present on the lesson.

# Mobile devices

Usage of telephones and computers without teacher's permission is a violation of discipline. In this case student does not receive a mark for the lesson and is obliged rework such a lesson. Mobile devices may be used during online testing only.

# **Behaviour** in auditorium

Course of MP5 discipline is provided for team work (student's group, staff members of medical institution and clinical foundation of department). All the communication environment is friendly, creative, open for constructive critics.

Developers:

Head of the Internal Medicine #2 Department, PhD, Associate Professor, Honored Doctor Of Ukraine

Shtanko V.A.

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Khyzhnyak O.V.

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Tykhonova S.A.

