Odessa National Medical University
Faculty of Medicine
Department of Internal Medicine №1 with the course of cardiovascular pathology

Syllabus course
Practical training in the therapeutic department of the hospital

Volume	38 hours (1.27 credits)
Semester, Year of study	VII – VIII 4
Days, time, place	According to the schedule 4 acad. hours, from 08.30 to 12.00 KNP OOS "Odessa Regional Clinical Hospital" (Odessa, Zabolotny St., 26).
Teacher(s)	Head of the Department: Karpenko Yuriy Ivanovich, Doctor of Medical Sciences, Professor, Honorary Doctor of Ukraine, Head of the Regional Center for Cardiac Surgery of the PRC OOS "Odessa Regional Clinical Hospital" Practical supervisor: Ekaterina Vladimirovna Kravtsova, assistant
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E-mail	vnutrimed1@onmedu.edu.ua
Workplace	KNP OOS "Odessa Regional Clinical Hospital", cardiology department, endocrinology department. 7th floor: Department of Internal Medicine No. 1: rooms No. 1, 2, 3 (assistant's), 4, 5, 6, 7, 8; lecture audience (right wing of the KNP OOS (administrative building): rooms No. 1,2. 6th floor: room 10.
Consulting	Face-to-face consultations: Monday - Friday, from 14.30 to 16.00, Saturday from 09.00 to 13.00. On-line consultations: Monday-Friday from 09.00 to 16.00 (the group teacher, after the class, determines the time and the number of students who can work off his academic debt and receive consultations).

COMMUNICATION

In person in classrooms, offices of the department, specialized departments of the hospital KNP OOS "Odessa Regional Clinical Hospital",remotely on the Microsoft Teams platform, in some cases upon prior notification - by ZOOM and in Viber groups.

ANNOTATION OF THE COURSE

The subject is to conduct practice for students of medical and international faculties as an assistant to the doctor of the therapeutic department of the hospital in the form

of patient supervision, including the interpretation of laboratory and instrumental studies in the cardiology and endocrinology departments.

Prerequisites:

Industrial medical practice in the therapeutic department of the hospital is based on the students' knowledge of propaedeutic of IM, propaedeutic of pediatrics, general surgery and basic disciplines (human anatomy and pathomorphology, physiology and pathophysiology, microbiology, virology and immunology, and pharmacology).

Postrequisites of the course: the acquired knowledge and skills, abilities and competences are the basis for continuing the study of IM in 5 and 6 courses, as well as emergency medicine, surgery, pediatrics and infectious diseases, and are the basis for further postgraduate education.

Purpose of the course: to prepare a specialist capable of performing professional activities, applying the acquired knowledge, skills and abilities in general and professional training for a specific list of symptoms, syndromes and emergency conditions in internal medicine that require special tactics for managing patients, laboratory and instrumental research, medical manipulations, to solve problems and tasks in medicine, health care and further training and consolidation of practical skills within the goals defined in the educational and professional program.

The tasks of the discipline are the acquisition of the following skills, teachings and competencies, namely:

1. Conduct a survey and clinical examination of patients with major diseases of the cardiovascular and endocrine systems, blood and hematopoietic organs, and analyze their results;
2. To determine the etiological and pathogenetic factors of the most common diseases of the cardiovascular and endocrine systems, blood and hematopoietic organs;
3. Analyze a typical clinical picture, identify clinical variants and complications of the most common diseases of the cardiovascular and endocrine systems, blood and hematopoietic organs;
4. Establish a preliminary diagnosis of the most common diseases of the cardiovascular and endocrine systems, blood and hematopoietic organs;
5. To prescribe laboratory and instrumental examination of patients with the most common diseases of the cardiovascular and endocrine systems, blood and hematopoietic organs and their complications;
6. Based on the assessment of the results of laboratory and instrumental examination, carry out a differential diagnosis, substantiate and establish a clinical diagnosis of the most common diseases of the cardiovascular and endocrine systems, blood and hematopoietic organs;
7. Determine the necessary mode of work and rest in the treatment of the most common diseases of the cardiovascular and endocrine systems, blood and hematopoietic organs;
8. Determine the necessary diet recommendations in the treatment of the most common diseases of the cardiovascular and endocrine systems, blood and hematopoietic organs;
9. Determine the principles of treatment of the most common diseases of the cardiovascular and endocrine systems, blood and hematopoietic organs;

10. To prescribe treatment, including prognosis-modifying, to the most common diseases of the cardiovascular and endocrine systems, blood and hematopoietic organs;
11. Determine the tactics of providing emergency medical care based on the diagnosis of an urgent condition and provide emergency medical care based on the diagnosis of an urgent condition;
12. To carry out primary and secondary prevention of the most common diseases of the cardiovascular and endocrine systems, blood and hematopoietic organs;
13. Assess the prognosis and work capacity of patients with the most common diseases of the cardiovascular and endocrine systems, blood and hematopoietic organs;
14. Perform medical procedures;
15. Maintain medical records;
16. Adhere to the requirements of ethics, bioethics and deontology in their professional activities.

Expected results:
As a result of mastering the content of IM4, the student must:
- know:
1. Etiology, risk factors for the development and progression of diseases of the cardiovascular and endocrine systems, blood and hematopoietic organs.
2. Basic principles of treatment of diseases of the cardiovascular and endocrine systems, blood and hematopoietic organs, based on the principles of evidence-based medicine.
3. Fundamentals of primary and secondary prevention of diseases of the cardiovascular and endocrine systems, blood and hematopoietic organs.
4. Basics of clinical pharmacology of drugs that are used in the treatment of diseases of the cardiovascular and endocrine systems, blood and hematopoietic organs.

be able to:
1. Communicate with the patient and his relatives, carry out a clinical examination of the patient with diseases of the cardiovascular and endocrine systems, blood and hematopoietic organs, namely, collect data on the patient's complaints, medical history, life history.
2. Evaluate information regarding the diagnosis based on the results of laboratory and instrumental studies, namely, to determine the list of necessary clinical, laboratory and instrumental studies, and evaluate their results.
3. To highlight the leading clinical symptom or syndrome. To establish the most probable or syndromic diagnosis of the disease. Assign laboratory and instrumental examination of the patient.
4. Carry out differential diagnosis of diseases. To establish a preliminary and clinical diagnosis.
5. Determine the principles of treatment of diseases, the necessary mode of work and rest, the nature of nutrition.
6. Diagnose emergency conditions.

7. Determine tactics and provide emergency medical assistance.
8. Perform medical procedures.
9. Conduct an examination of the ability to work.
10. Maintain medical records.

DESCRIPTION OF THE COURSE

Forms of education

The course Industrial medical practice in the therapeutic department of the hospital consists of practical lessons (PL) - 8 hours, organization of students' independent work (IWS) - 30 hours.

Teaching methods: the organization of the PL on industrial medical practice is aimed at making the student a participant in the process of providing medical care to patients from the moment of their hospitalization, examination, diagnosis, treatment to discharge from the hospital, with the provision of conditions for mastering professional practical skills; teamwork skills of participants in the medical care process; and for the formation of a student's understanding of responsibility for the level of their training, its improvement during training and professional activity:

- on the 1st PL of the corresponding section, the student is provided with a detailed work plan, which includes: a list of studies that the student must master; algorithms for examinations and diagnosis, treatment, prevention according to the standards of evidence-based medicine; a list of topical patients for supervision throughout the study of the section;

determining the time for the report of the patient's medical history in the study group, at clinical rounds, practical conferences.

- the student must supervise patients with diseases and conditions in accordance with the thematic plan of the PL; supervision of a thematic patient includes: 1) clarification of the patient's complaints, conducting a survey on organs and systems, studying the anamnesis of illness and life; 2) conducting a physical examination of the patient and determining the main symptoms and syndromes of the disease; 3) analysis of laboratory and instrumental examination data; 4) the formulation of the diagnosis; 5) the appointment of treatment with the completion of the instruction sheet of prescriptions; 6) determination of methods of primary and secondary prevention; 5) the appointment of treatment with the completion of the instruction sheet of prescriptions; 6) determination of methods of primary and secondary prevention; 7) the report of the results of the examination of the patient in the study group, analysis under the guidance of the teacher and with the participation of a team of students of the group of the correctness of the diagnosis, differential diagnosis, prescribed examination, treatment tactics, assessment of prognosis and ability to work, prevention.
- on the PL on industrial practice, students are recommended to keep a diary, in which it is necessary to enter short information about the patients examined during the PL, diagnosis, examination plan and prescribed treatment, which are presented to the teacher for control.

Content of the discipline

PL 1 - Conducting a survey and physical examination of patients with major diseases of the cardiovascular system. Evaluation of clinical, biochemical and bacteriological studies of blood, urine. Evaluation of these instrumental research methods: X-ray examination of the chest organs, ultrasound of the thyroid gland and abdominal cavity, ECG, Echo.

PL 2 - Rationale and formulation of the clinical diagnosis. Interpretation of the general principles of treatment, primary and secondary prevention for major diseases of the cardiovascular system. Emergency care in urgent situations (conditions) with hypertensive crisis and acute coronary syndrome.

PL 3 - Conducting a survey and physical examination of patients with major diseases of the endocrine system. Evaluation of clinical, biochemical and bacteriological studies of blood, urine. Evaluation of these instrumental research methods: X-ray examination of the chest organs, ultrasound of the thyroid gland and abdominal cavity, ECG, Echo, scanning of the thyroid gland and abdominal organs.

PL 4 - Rationale and formulation of the clinical diagnosis. Interpretation of general principles of treatment, primary and secondary prevention for major diseases of the endocrine system. Emergency care in urgent situations (conditions) with diabetic coma, hyperthyroidism, acute adrenal insufficiency, etc.;

Independent work of a student on industrial practice "The main duties and professional actions of a doctor of the therapeutic department of a hospital"

1. Principles of organizing the provision of planned and emergency therapeutic care in Ukraine;
2. Interview and physical examination of patients with major diseases of the cardiovascular and endocrine systems;
3. Interpretation of laboratory and instrumental research methods in the clinic of internal medicine;
4. Substantiation and formulation of the diagnosis for major diseases of the cardiovascular and endocrine systems;
5. Treatment, primary and secondary prevention of major diseases of the cardiovascular and endocrine systems;
6. Providing emergency care in the clinic of internal medicine;
7. Principles of ethics and deontology in the practice of a physician in a therapeutic department.
8. Preparation for differential credit.

List of recommended literature:

Main:

1. Bates' Guide To Physical Examination and History Taking (Lippincott Connect) 13th Edition
2. Harrison's Principles of Internal Medicine, Twentieth Edition (Vol.1 & Vol.2) 20th Edition, 2018
3. Pocket Medicine: The Massachusetts General Hospital Handbook of Internal Medicine 6th Edition, 2016

4. CURRENT Medical Diagnosis and Treatment 2019 58th Edition

Additional:

1. Internal Medicine: in 2 books. Book 1. Diseases of the Cardiovascular and Respiratory Systems: textbook / N.M. Seredyuk, I.P. Vakaliuk, R.I. Yatsyshyn et al.
2. Current Medical Diagnosis and Treatment 2020 by Stephen J. McPhee; Michael W. Rabow; Maxine A. Papadakis, 2019
3. Oxford Desk Reference: Endocrinology, 2019
4. Case Discussions in Endocrinology , 143 pages, Nova Science Pub Inc (February 15, 2017)
5. Greenspan's Basic and Clinical Endocrinology, Tenth Edition (Greenspan's Basic & Clinical Endocrinology) 10th Edition, 944 pages, McGraw-Hill Education / Medical; 10th edition (October 10, 2017)
6. Endocrinology - Medical School Crash Course , 148 pages, Independently published (March 8, 2020)

Information electronic resources:

1. https://www.heart.org/
2. https://www.thyroid.org
3. https://www.aace.com/
4. https://www.acc.org/
5. https://www.diabetes.org/
6. https://www.escardio.org/
7. https://www.ese-hormones.org/publications/guidelines/
8. https://ehaweb.org/
9. https://www.hematology.org/

Information Support:

Electronic library ONMedU: links to enclosed guidelines for lectures and PZ, guidelines.

ONMedU repository: scientific journals, dissertation abstracts

EVALUATION

Monitoring methods:

For mastering each topic of the section, the student receives an assessment on a 4-point (traditional) scale, including all types of work provided for by the assignments of industrial practice. At the end of the internship, the current academic performance is calculated as the arithmetic average of all grades received by the student according to the traditional scale, rounded to 2 (two) decimal places.

Forms and methods of final control:

The final control in the form of a differentiated test is carried out on the day assigned by the schedule of the educational part of ONMedU.

Students who have attended all the classes provided for by the program of industrial practice, have completed the entire volume of the IWS (a completed diary is

available) and have an average score for current educational activities of at least 3.00 are admitted to differential credit.
The differential credit form is standardized and includes practical training control.
How will the knowledge assessment (score section) of applicants for higher education be carried out?
The practical training score is calculated as follows: according to the 4-point traditional scale, the average score is first calculated as the arithmetic mean of two components: the current average score as the arithmetic mean of all current assessments; traditional grade for differential credit.
The average score in industrial practice is converted into a traditional assessment in a 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 a given subject.
Conversion of the traditional assessment in a discipline on a multi-point scale: performed by the information and computing center of the university.

Average score by discipline	Student Received Ratio average score in the discipline to the maximum possible value this indicator	Assessment by discipline on a 4-point scale (traditional assessment)
4,45 – 5,0	90-100%	5
3,75 – 4,44	75-89%	4
3,0 – 3,74	60-74%	3

Independent work of students (IWS)
Includes extracurricular training for students; work in the departments of the clinical base of the departments, including in laboratories and the department of functional diagnostics, interpretation of data from laboratory and instrumental research methods for internal pathology in extracurricular time; assimilation of practical skills and work with patients; individual IWS (presentation at the scientific-practical conference of the clinic, writing articles, reporting an essay at a practical lesson, participating in the work of a student circle, discipline Olympiads, etc.).
The teachers of the department provide the opportunity to perform the IWS and during the PL and differential credit they monitor and evaluate its implementation. Additionally, control over the implementation of the CDS is carried out when checking the report on the implementation of the CDS in the form of a diary.

COURSE POLICY
Policy regarding deadlines and retaking: the ONMedU curriculum provides for and established a schedule for passing and retaking a differentiated test.
Academic Integrity Policy
It is unacceptable to violate academic integrity while writing a field practice diary. When using Internet resources and other sources of information, the student must indicate the source used during the assignment.
All written works are checked for plagiarism and accepted for assessment with correct text borrowings no more than 20%.

In case of revealing the fact of plagiarism, the student receives an unsatisfactory mark for the task and must re-complete the task.
Cheating during differential credit is prohibited (including using mobile devices).

Visits and arrivals policy

Attending classroom lessons (CL) is a mandatory component to assess the completeness of the discipline study. For objective reasons (for example, illness, epidemic circumstances, international internship), training can take place remotely in agreement with the head of the department, the dean. The completed assignments according to the thematic plan should be presented during consultation with the teacher.
All tasks stipulated by the program must be completed on time in accordance with the schedule.
A student who is late is considered to have missed the lesson for an unjustified reason and the lesson on the topic is assessed in additional hours of working off academic debt, while he has the right to attend the lesson.

Mobile devices

The use of telephones and computer devices without the teacher's permission is a violation of discipline, the student does not receive a grade for the lesson and is obliged to work out such a lesson. Mobile devices are only allowed to be used during online testing.

Audience behavior

The course provides for work in a team (student group, department staff, staff of the department's clinical base). The entire communication environment is friendly, creative, open to constructive criticism.