

MINISTRY OF HEALTH CARE OF UKRAINE  
DONETSK NATIONAL MEDICAL UNIVERSITY

"APPROVED"

Vice-Rector for

Scientific and Pedagogical Work

Prof. O. Chernyshova



№/00 02 2024

**WORKING PROGRAM**

**«Clinical Practice Training»**

speciality 222 «Medicine», 228 «Pediatrics»

(code and name of speciality)

education level Second (master's)

(education level name, EQL)

education program Educational and professional program «Doctor»

Educational and professional program «Paediatrician»

(code, name of education program)

status  
faculty  
year

obligatory  
medical  
4

DEVELOPER:

University Supervisor of Clinical practice



Candidate of Medical  
Sciences, Associate Professor  
Vyacheslav HUSIEV

"APPROVED"

Guarantor of the educational and  
professional program «Doctor»  
Candidate of Medical Sciences,  
Associate Professor  
Serhii DUBYNA



Guarantor of the educational and  
professional program «Paediatrician»  
Doctor of Medical Sciences,  
Professor  
Olha CHERNYSHOVA



« 14 » 02 2024.

## Introduction

The program “Clinical Practice Training” is compiled according to the Standard of Higher Education (hereinafter - the Standard) for the second (master's) level - branch of knowledge **22 “Health care”** - specialty **222 “Medicine”, 228 “Paediatrics”** and the sample curriculum for training specialists of the second (master's) level of higher education in the field of knowledge 22 “Health care” in higher educational institutions of the Ministry of Health of Ukraine in specialty **222 “Medicine”, 228 “Paediatrics”** for qualification of educational “Master of Medicine”, qualification of professional “Doctor”, “Pediatrician” approved by the Ministry of Health of Ukraine on 08.11.2021, “Regulations on Clinical Practice Training at Donetsk National Medical University”, approved by the Academic Council of the University on 24.05.2023, minutes № 8 and “Regulations on the organization of the educational process at Donetsk National Medical University”, adopted by the Academic Council of the university on 12.10.2021, minutes № 2.

The Clinical Practice Training program is a methodical document for education applicants and practice training managers. It is necessary for clear planning and regulation of the activities of education applicants and instructors.

### 1. Academic Discipline’s Description

The academic discipline "**Clinical Practice Training**" for 4h year education applicants comprises 4 content modules: 1 - "The main responsibilities and professional actions of the doctor of the therapeutic department"; 2 - " The main responsibilities and professional actions of the doctor of the surgical department "; 3 - "The main responsibilities and professional actions of the doctor of the pediatric hospital department " and 4 - "The main responsibilities and professional actions of the doctor of the obstetrics department " lasting 240 hours, which is 8 credits.

<i>Discipline structure</i>	<i>Number of hours</i>			<i>Student’s independent studies</i>	<i>Year of studies</i>	<i>Type of control</i>
	<i>Total hours/ ECTS credits</i>	<i>Classwork</i>				
		<i>Lectures</i>	<i>Practical classes</i>			
<i>Module on clinical practice training</i>	<b>240/8</b>	-		<b>240</b>	4	<i>FC</i>
<i>Content module 1. Internal medicine practice</i>	75/2,5	-		75	4	<i>FC</i>
<i>Content module 2. Surgery</i>	45/1,5	-		45	4	<i>FC</i>

<i>practice</i>						
<i>Content module 3. Pediatrics practice</i>	75/2,5	-		75	4	<i>FC</i>
<i>Content module 4. Obstetrics practice</i>	45/1,5	-		45	4	<i>FC</i>

At the end of each content module there is a final control (differential credit) of practical skills and knowledge according to the discipline and is ranked into one grade in "Clinical Practice Training".

Academic discipline "**Clinical Practice Training**" for 4th year applicants:

- is based on the knowledge gained by students in the study of medical biology, normal and pathological anatomy, topographic anatomy, normal and pathological physiology of the female reproductive system, histology and embryology, microbiology, pharmacology, propaedeutics of internal and pediatric diseases, general surgery and is integrates with these disciplines.

- lays the foundations to study modern diagnostic technologies used in clinical practice, which involves the integration of teaching with different disciplines and the formation of skills to apply knowledge of modern diagnostic methods in the process of further study and professional activities.

## 2. Aim and Objectives of Academic Discipline

The **AIM** of academic discipline Clinical Practice Training is: acquisition of knowledge on the formation of the ability to apply the acquired knowledge, skills, practical skills to solve typical problems of a doctor in health care field in the relevant position, use basic and additional examination methods according to the educational-professional program (EPP) training of the specialist in speciality **222 "Medicine", 228 "Pediatrics"**.

### **Objectives:**

- conduct surveys and physical examinations of patients and analyze their results;
- to plan the examination scheme for a particular patient depending on the features of the clinical course of the disease;
- analyze the results of basic laboratory and instrumental examination methods;
- to determine the leading pathological symptoms and syndromes in the most common diseases;
- to make a differential diagnosis and make a preliminary diagnosis of the most common diseases;
- to plan the examination scheme of a specific pregnant woman depending on the characteristics of the clinical course of pregnancy.
- plan the tactics for carrying out physiological childbirth and the postpartum period;
- make a preliminary diagnosis of complications of pregnancy, childbirth and the postpartum period;

- to interpret the general principles of treatment, rehabilitation and prevention of the most common therapeutic, surgical, pediatric diseases and obstetric and gynecological pathological conditions;
- participate in the provision of emergency medical care in emergencies;
- perform the necessary medical manipulations;
- to acquire knowledge of moral and deontological principles of a medical specialist and the principles of professional subordination in the clinic;
- to master the necessary medical manipulations

The objective of practice is to consolidate the knowledge and skills acquired during the study of basic clinical and theoretical disciplines (examination of the patient, establishment of clinical diagnosis, treatment) and further improvement of practical skills, familiarization with the organization of medical work and working conditions of the doctor in the city and area, and consolidation of skills of sanitary awareness-raising activities.

Competences and learning outcomes, to formation of which Clinical Practice Training contributes (interrelation with the normative content of higher education training, formulated in terms of learning outcomes in the Standard). According to the Standard's requirements, **Clinical Practice Training** provides students with the acquisition of **competencies**:

**- integral:**

Ability to solve typical and complex specialized problems and practical problems in a professional health care activity, or in learning process that involves research and / or innovation and is characterized by the complexity and uncertainty of conditions and requirements.

**- general:**

1. Ability to abstract thinking, analysis and synthesis, learn and master modern knowledge.
2. Ability to apply knowledge in practical situations.
3. Knowledge and understanding of the subject area and understanding of professional activity.
4. Ability to adapt and act in a new situation.
5. Ability to make informed decisions, work in a team.
6. Interpersonal skills.
7. Ability to communicate in the state language both orally and in writing, ability to communicate in a foreign language.
8. Skills in the use of information and communication technologies.
9. Definiteness and perseverance in terms of tasks and responsibilities.
10. Ability to act socially responsibly and consciously.
11. The desire to preserve the environment.
12. Ability to act on the basis of ethical considerations (motives).

**- special (professional, subject):**

1. Skills of interviewing and clinical examination of the patient.
2. Ability to determine the required list of laboratory and instrumental studies and evaluate their results.

3. Ability to establish a preliminary and clinical diagnosis of the disease.
4. Ability to determine the required mode of work and rest in the treatment of diseases.
5. Ability to determine the nature of nutrition in the treatment of diseases.
6. Ability to determine the principles and nature of treatment of diseases.
7. Ability to diagnose emergencies.
8. Ability to determine the tactics of emergency medical care.
9. Skills in providing emergency medical care.
10. Skills of medical manipulations.
11. Ability to carry out sanitary and hygienic and preventive measures.
12. Ability to plan and conduct preventive and anti-epidemic measures against infectious diseases.
13. Ability to determine the tactics of management of persons subject to dispensary supervision.
14. Ability to keep medical records.
15. Ability to conduct epidemiological and medical-statistical studies of public health; processing of state, social, economic and medical information.
16. Ability to assess the impact of the environment, socio-economic and biological determinants on the health of the individual, family, population.

### **3. Learning Outcomes**

**Integrative final program learning outcomes, to formation of which the discipline "Clinical Practice Training" contributes, lay the foundation for the further formation of the following program learning outcomes according to EPP "Medicine" in the field of knowledge 22 "Health", specialty 222 "Medicine", 228 "Pediatrics":**

1. Collect data on patient complaints, medical history, life history, conduct and evaluate the results of physical examination.
2. Evaluate information about the diagnosis, using a standard procedure based on the results of laboratory and instrumental studies. Highlight the leading clinical symptom or syndrome. Establish the most probable or syndromic diagnosis of the disease. Assign laboratory and / or instrumental examination of the patient. Carry out differential diagnosis of diseases. Establish a preliminary and clinical diagnosis.
3. Determine the necessary mode of work and rest in the treatment of the disease.
4. Determine the necessary therapeutic nutrition in the treatment of the disease.
5. Determine the principles and nature of treatment (conservative, operative) disease.
6. Determine the tactics of emergency medical care based on the diagnosis of emergency.
7. Provide emergency medical care on the basis of a diagnosis of emergency.
8. Organize medical and evacuation measures among the population and servicemen, taking into account the existing system of medical and evacuation support.
9. Perform medical manipulations.
10. Plan measures to prevent the spread of infectious diseases.
11. Carry out detection and early diagnosis of infectious diseases; primary anti-epidemic measures in the center of an infectious disease. Identify risk groups, risk areas, time of risk, risk factors and carry out epidemiological analysis of infectious diseases in the population.

12. Prepare an annual report on personal production activities; keep medical records of the patient and the population.
13. Form goals and determine the structure of personal activities.
14. Adhere to a healthy lifestyle, use the techniques of self-regulation and self-control.
15. Be aware of and guided in their activities by civil rights, freedoms and responsibilities
16. Raise the general educational and cultural level.
17. Adhere to the requirements of ethics, bioethics and deontology in their professional activities.
18. Organize the necessary level of individual safety (own and persons cared for) in case of typical dangerous situations in the individual field of activity.

**As a result of medical practice, the education applicant must know:**

1. etiological and pathogenetic factors of diseases.
2. classify and analyze the typical clinical pattern.
3. make a plan of examination and analyze the data of laboratory and instrumental examinations in the typical course of the disease.
4. demonstrate mastery of the principles of treatment, rehabilitation and prevention of diseases.
5. to diagnose.
6. provide emergency care in case of major emergencies.
7. to carry out differential diagnostics and to make the preliminary diagnosis at a typical course of diseases.
8. assess the prognosis of the disease.
9. demonstrate mastery of moral and deontological principles of a medical specialist and the principles of professional subordination.

**Be able to:**

1. collect medical history (anamnesis) ;
2. examine the patient;
3. plan examination of the patient;
4. interpret the results of laboratory tests and instrumental examination;
5. to carry out differential diagnosis of the most widespread diseases at their typical course;
6. determine the preliminary clinical diagnosis;
7. to determine therapeutic, surgical tactics of treatment;
8. determine the tactics of managing a pediatric patient;
9. determine the tactics of management of obstetric patients;
10. prescribe medical nutrition;
11. provide emergency medical care;
12. solve situational problems;
13. to practice practical skills at the patient's bedside;
14. keep medical records.

#### 4. Structural Plan of the Course

Modules, themes	Practical classes	Independent study	Total
<b>Content module I: Main duties and professional actions of the doctor of the therapeutic department of the hospital</b>			
Organization of the work of a physician in the hospital. Principles of organization of planned and urgent therapeutic care in Ukraine.		10	10
Obtaining anamnesis and physical examination of patients with main diseases of the respiratory, digestive, hematopoietic organs and endocrine system. Improving the skills of interpretation of laboratory and instrumental methods of examination in internal medicine.		20	20
Improving skills in substantiating and formulating a diagnosis for the main diseases of the respiratory, digestive, and endocrine systems.		10	10
Appointment of treatment, primary and secondary prevention of main diseases of the organs of respiratory, digestive and endocrine system.		10	10
Improving skills in emergency care in the clinic of internal medicine. Principles of ethics and deontology in the practice of the doctor of the therapeutic department.		15	15
Final control		10	10
<b>Total:</b>		75	75
<b>Content module II: Main duties and professional actions of the doctor of the surgical department of the hospital</b>			
Principles of organization of planned and emergency surgical care in Ukraine.		8	8
Clinic, diagnosis and treatment tactics in surgical pathology in the hospital.		8	8
Improving the skills of clinical, laboratory and instrumental diagnostics in a surgical hospital.		8	8
Improving the provision of emergency medical care for urgent surgical diseases.		8	8
Principles of ethics and deontology in the practice of the doctor of the surgical department.		8	8
Final control		5	5
<b>Total:</b>		45	45
<b>Content module III: Main duties and professional actions of the doctor of the pediatric department of the hospital</b>			
Principles of organization of medical care for children in Ukraine, the basics of Ukrainian		13	13

legislation on child health. Principles of ethics and deontology in the practice of a pediatrician.			
Improving the skills of clinical, laboratory and instrumental diagnosis of main children's diseases in a children's hospital.		13	13
Tactics of treatment of main children's diseases in a children's hospital.		13	13
Providing emergency medical care in a children's hospital.		13	13
Principles of ethics and deontology in the practice of the doctor of the pediatric department.		13	13
Final control		10	10
<b>Total:</b>		<b>75</b>	<b>75</b>
<b>Content module IV: Main duties and professional actions of the maternity hospital doctor</b>			
Principles of organization of medical care for pregnant women, women in labor and women in labor in Ukraine. Fundamentals of Ukrainian legislation on maternal and child health care.		8	8
Management of physiological childbirth and the postpartum period.		8	8
Improving skills in the interpretation of clinical, laboratory and instrumental methods of diagnosis in obstetrics.		8	8
Diagnosis and tactics of treatment of complications of pregnancy, childbirth, pathological conditions of the fetus in an obstetric hospital (multiple pregnancy, placental dysfunction, distress of the fetus, retardation of fetal development, isoantigenic incompatibility of maternal and fetal blood, early gestosis, hypertensive disorders, preeclampsia, eclampsia, miscarriage).		8	8
Providing emergency medical care in obstetrics. Principles of ethics and deontology in the practice of the maternity ward.		8	8
Final control		5	5
<b>Total:</b>		<b>45</b>	<b>45</b>
<b>Total hours/ credits</b>		<b>240</b>	<b>240/8</b>

### 5. Program of the Discipline

**Content module I:** Main duties and professional actions of the doctor in the therapeutic department of the hospital.

- organization principles of planned and urgent therapeutic care in Ukraine.

- improving skills in obtaining anamnesis and physical examination of patients with main diseases of the organs of respiratory, digestive and endocrine systems;
- mastering the skills of interpretation of laboratory and instrumental methods of examination in internal medicine;
- improvement of substantiation skills and formulation of the diagnosis at the basic diseases of organs of respiratory, digestive and endocrine systems;
- appointment of treatment, primary and secondary prevention of mainr diseases of the respiratory, digestive, hematopoietic organs and endocrine system;
- mastering the skills of emergency care in the clinic of internal medicine;
- application of the principles of ethics and deontology in the practice of the doctor of the therapeutic department.

**Content module II:** Main duties and professional actions of the doctor in the surgical department of the hospital

- principles organization of planned and emergency surgical care in Ukraine;
- improvement of skills of clinical, laboratory and instrumental diagnostics and tactics of treatment of the main surgical diseases in the conditions of a hospital;
- mastering the skills of providing emergency medical care for urgent surgical diseases;
- application of the principles of ethics and deontology in the practice of the doctor of the surgical department.

**Content module III:** Main duties and professional actions of the doctor in the pediatric department of the hospital

- organization principles of medical care for children in Ukraine. Fundamentals of Ukrainian legislation on child health;
- improvement of skills of clinical, laboratory and instrumental diagnostics and tactics of treatment of the main children's diseases in the conditions of a children's hospital;
- mastering the skills of providing emergency medical care in emergencies in children;
- implementation of the principles of ethics and deontology in the practice of a pediatrician.

**Content module IV:** Main duties and professional actions of the maternity hospital doctor

- organization principles of medical care for pregnant women, women giving birth and after birth in Ukraine, basics of Ukraine legislation on maternal and child health;
- diagnosis of early and late stages of pregnancy;
- participation in the management of physiological childbirth and the postpartum period;
- clinical, laboratory, instrumental diagnostics in obstetrics;
- diagnosis of complications of pregnancy, childbirth, pathological conditions of the fetus in obstetric hospital (multiple pregnancy, placental dysfunction, fetal distress, fetal development retardation, isoantigenic incompatibility of maternal and fetal blood, early gestosis, hypertensive disorders, preeclampsia, eclampsia, miscarriage);
- tactics for treating complications during pregnancy, childbirth, and the postpartum period, pathological conditions of the fetus in an obstetric hospital (multiple

pregnancy, placental dysfunction, fetal distress, fetal development retardation, isoantigenic incompatibility of maternal and fetal blood, early gestosis, hypertensive disorders, preeclampsia, eclampsia, miscarriage);

- mastering the skills of providing emergency medical care in obstetrics;
- application of the principles of ethics and deontology in the practice of the obstetrician department.

## **6. Monitoring Training Progress Methods and Tools of Standardized Assessment Current Learning Activity and Final Control**

Assessment of independent practical study of education applicants (IPSS) on practice bases and final control (FC) are carried out on the last day of practice. The FC is accepted by the commission (according to the order of the DNMU rector) consisting of the head of the practice and employees of the profile departments.

The module assessment is defined as the sum of the current controls for content modules (in points), which is presented in the evaluation of practical skills in accordance with the list determined by the practice program.

*The maximum number of points assigned to students for the module (credit credit) - 200, including current activity (content modules) - 120 points (60%), according to the results of final control - 80 points (40%).*

### **Individual Study Assessment of Education Applicant**

Points for individual assignments are awarded to the education applicant only under the conditions of their successful completion and defense. The grade for the individual independent study is calculated as the average score when laying down the general list of skills and abilities of each of the four content modules: internal medicine, surgery, obstetrics, pediatrics (see Annexes 1-4). The arithmetic mean of content modules is converted into points (according to the CSM assessment instruction). The total amount of points for IPSS ranges from 72 to 120 points. The final control is allowed for education applicants who have completed the medical work practice program, have properly issued reporting documents and received at least 72 points for their current activities.

### **Assessment Criteria for Final Control (FC)**

Evaluation of the FC is carried out in accordance with the Regulation on the organization and conduct of control measures, making up for missed classes and improving the rating of DNMU students, enacted by the Order of DNMU No. 397 dated September 02, 2019.

[Положення про організацію та проведення контрольних заходів, відпрацювання пропущених занять та підвищення рейтингу • Донецький національний медичний університет \(dnmu.edu.ua\)](https://dnmu.edu.ua)

The final control of defense of Clinical Practice Training is standardized and is exposed as arithmetic mean (4 points system), taking into account the following steps:

- 1) assessment of students' knowledge, skills and practical abilities based on the practice of grades from diary and work characteristics (see Annexes 5-8);

2) evaluation of the correctness of keeping and registration of reporting documentation of students (diary, final report);

3) results of assessment of education applicants' knowledge during interview at the defense of Clinical Practice Training (oral interview, use of tests and/or situational tasks) and practical training.

The total number of points that the student scored from the discipline is defined as the average score for current learning activity, converted to a 200 point scale (according to the CSM assessment instruction).

The FC regulation provides for the obtaining and demonstration of skills in accordance with the 4th -year students of four content modules: internal medicine, surgery, obstetrics, and pediatrics.

According to the results of the FC, the student receives four grades: internal medicine, surgery, pediatrics, and obstetrics. These four estimates calculate the average grade for FCs in clinical practice training. Then the average grade is converted to FC points. The final control is considered credited if the student has scored at least 60% of the maximum amount of points for the FC (i.e., not less than 48 points, this number of ECTS points is equal to the amount of traditional estimates "3").

#### **Rating Matching Scale**

The result obtained on a 200-point scale is converted into the traditional four-point system and the ECTS system according to the following table:

Grade in 200-point system	Grade on the traditional four-point scale	Grade in ECTS system
180-200	5	A
164-179	4	B
150-163		C
135-149	3	D
120-134		E
<120	2	FX

### **Annex 1. General Digital Report on the Results of Passing Clinical Practice Training in Internal Medicine (IPSS)**

**Education applicant** \_\_\_\_\_ **4th year of Medical faculty №** \_\_\_\_\_ **, group** \_\_\_\_\_  
**on the base of municipal hospital №** \_\_\_\_\_ **city** \_\_\_\_\_

List of Skills and Abilities	Number of skills	Grade in Points
1. Obtaining anamnesis and physical examination of patients with the main diseases of the respiratory, digestive and endocrine systems, formulating a clinical diagnosis (palpation of the chest, atrial region, joints, lymph nodes, thyroid gland, abdomen, blood vessels, pulse assessment; percussion of the lungs, heart, abdomen; auscultation of the lungs, heart, vessels and abdomen)	4-6-8	3-5
2. Daily cure of patients in a hospital	4-6-8	3-5
3. Shifting in the emergency department or intensive care unit (work in the unit – grade 3; duty in the unit – grade 4, duty in the emergency department – grade 5);	1	3-5
4. Participation in the provision of emergency care in urgent	4-6-8	3-5

situations (conditions): acute respiratory failure (bronchial asthma attack); anaphylactic reactions (acute urticaria, Quincke's edema, anaphylactic shock); hepatic colic; diabetic coma (ketoacidotic, hypoglycemic), hyperthyroidism (thyrotoxic crisis); hypothyroidism (hypothyroid coma); acute renal failure, etc.		
5. BP measurement (in upper and lower extremities);	15–25–30	3-5
6. Evaluation of clinical, biochemical and bacteriological studies of blood, urine, feces, sputum, gastric juice and duodenal research, pH-metry;	15–25–30	3-5
7. ECG registration and analysis; glucometry;	10–15–20	3-5
8. Data analysis of external breathing function;	1-3-5	3-5
9. Analysis of radiographs;	8–10–12	3-5
10. Analysis of endoscopic research data;	3–5–8	3-5
11. Analysis of data from echocardiography, ultrasound of abdominal organs, blood vessels.	3–5–8	3-5
Grade point average		72-120

Supervisor's signature \_\_\_\_\_

**Annex 2. General Digital Report on the Results of Passing Clinical Practice Training in Surgery (IPSS)**

**Education applicant \_\_\_\_\_ 4th year of Medical faculty № , group \_\_\_\_\_ on the base of municipal hospital № \_\_\_\_\_ city \_\_\_\_\_**

List of Skills and Abilities	Number of skills	Grade in Points
1. Daily cure of patients in a hospital, (Palpation of chest, joints, lymph nodes, thyroid gland, mammary glands, abdomen, blood vessels; percussion of the lungs, abdomen; auscultation of the lungs, blood vessels and abdomen).	4–6–8	3-5
2. Examination of patients, formulation of clinical diagnosis, preparation of medical history.	4–6–8	3-5
3. Shifting in the department on an emergency day or intensive care unit, trauma center; (work in the unit – grade 3; duty in the unit grade 4, duty in the department on an urgent day – grade 5)	1	3-5
4. Peculiarities of assistance during emergency and planned operations.	3–4–5	3-5
5. Evaluation of clinical tests (general blood and urine analysis) and biochemical blood tests (total bilirubin and fractions, blood proteins, amylase, blood electrolytes, coagulogram, etc.) in the surgical department.	10–15–20	3-5
6. Evaluation of instrumental examination data (X-ray, CT, sonography of abdominal organs, fibrogastroduodenoscopy, colonoscopy, etc.) in the surgical department.	10–15–20	3-5
7. Peculiarities of assistance in the dressing room: wound care, drainage, dressing changes, surgical treatment of purulent wounds.	1–3–5	3-5
8. Assisting in the dressing room: wound care, suture removal.	1–3–5	3-5

9. Participation in the preparation of the patient for surgery; (venipuncture, determination of blood group, rhesus type, testing for individual and biological compatibility, transfusion of blood components and blood substitutes).	4-6-10	3-5
10. Participation in the provision of emergency care for bleeding, septic and hemorrhagic shock; correction of water-electrolyte disturbances and acid-base status, etc., digital examination of the rectum, catheterization of the urinary bladder with a soft catheter.	1-3-5	3-5
Grade point average		72-120

Supervisor's signature \_\_\_\_\_

**Annex 3. General Digital Report on the Results of Passing Clinical Practice Training in Pediatrics (IPSS)**

**Education applicant \_\_\_\_\_ 4th year of Medical faculty № , group \_\_\_\_\_  
on the base of municipal hospital № city**

List of Skills and Abilities	Number of skills	Grade in Points
1. Daily care of sick children in a hospital; (Palpation of the chest, atrial region, joints, lymph nodes, thyroid gland, abdomen, vessels, determination of pulse; percussion of the lungs, heart, abdomen; auscultation of the lungs, heart, vessels, and abdomen);	4-6-8	3-5
2. Examination of patients, formulation of clinical diagnosis, preparation of medical history;	4-6-8	3-5
3. Shifting in the emergency department or intensive care unit (work in the unit – grade 3; duty in the unit – grade 4, duty in the intensive care unit – grade 5);	1	3-5
4. Participation in the provision of emergency care to children in urgent situations (conditions) with convulsions, hyperthermic syndrome, exicosis and toxicosis of children of the first year of life, syncope, edema of the lungs and larynx, bronchospasm, asthmatic condition, heart rhythm disorders, heart failure, infectious-toxic shock, acute renal and liver failure, complications of vaccination and medical therapy (allergic reactions), use of medicines: instillation of drops in the eyes, application of ointment under the eyelid, etc.;	4-6-8	3-5
5. BP measurement in upper and lower extremities;	10-15-20	3-5
6. Evaluation of clinical, biochemical, bacteriological and immunological studies of blood, urine, feces, sputum, etc.	15-25-30	3-5
7. Evaluation of FGDS data with pH-metry, colonoscopy, bronchoscopy	1-3-5	3-5
8. ECG registration and analysis	5-10-15	3-5
9. Evaluation of spirometry and echocardiography data	2-4-6	3-5
10. Data analysis of radiographs of chest organs, gastrointestinal tract and urinary system	4-6-8	3-5
Grade point average		72-120

Supervisor's signature \_\_\_\_\_

**Annex 4. General Digital Report on the Results of Passing Clinical Practice  
Training in Obstetrics (IPSS)**

**Education applicant** \_\_\_\_\_ **4th year of Medical faculty №** , **group** \_\_\_\_\_  
**on the base of municipal hospital №** \_\_\_\_\_ **city** \_\_\_\_\_

List of Skills and Abilities	Number of skills	Grade in Points
1. Daily care of pregnant women, women in labor, women after delivery.	4–6–8	3-5
2. Examination of pregnant women, women in labor and women after delivery, participation in the preparation of the birth history, drawing up a birth plan.	4–6–8	3-5
3. Diagnosis of early (late) pregnancy, determination of the estimated date of birth, mass шa epy fetus (in late pregnancy).	5–7–10	3-5
4. Auscultation of the fetal heartbeat.	5–7–10	3-5
5. External obstetric examination of pregnant women (pelviometry, Solovyov index, Michaelis rhombus, techniques according to Leopold).	8–12–15	3-5
6. Internal obstetric examination.	1–2–3	3-5
7. Participation in the management of physiological childbirth, the postpartum period.	1–3–5	3-5
8. Assessment of laboratory and instrumental examination results of pregnant women, fetuses, women in labor, women after delivery and diagnosis of pregnancy complications (hypertensive disorders, isoantigen incompatibility, pathological conditions of the fetus).	10–15–20	3-5
9. Participation in carrying out the primary toilet of the newborn.	1–2–3	3-5
10. Participation in the treatment of pregnancy complications, childbirth, pathological conditions of the fetus in obstetric setting (placental dysfunction, distress of the fetus, retardation of fetal development, isoantigenic incompatibility of maternal and fetal blood, early gestosis, hypertensive disorders, preeclampsia, eclampsia, miscarriage, multiple pregnancy). Participation in emergency care in obstetrics (eclampsia, artificial lung ventilation and indirect heart massage in newborn asphyxia).	1–2–3	3-5
Grade point average		72-120

Supervisor's signature \_\_\_\_\_

**LIST OF SKILLS AND PRACTICAL ABILITIES  
FOR THE FINAL MODULE CONTROL**

**Content module I: The main duties and professional actions of a doctor in a therapeutic department of a hospital.**

1. Physical methods of examining the patient (examination, percussion, palpation, auscultation, blood pressure measurement).
2. Diagnosis and choice of treatment tactics.

3. Interpretation of data from laboratory tests of blood, urine, sputum, feces, pleural and ascetic fluid, duodenal sounding and ph-metry.
4. ECG registration and analysis; glucometry.
5. Interpretation of data on the function of external breathing.
6. Ultrasound of abdominal organs, blood vessels, echocardiography
7. Emergency care in urgent situations (conditions) with acute respiratory failure (bronchial asthma attack); anaphylactic reactions (acute urticaria, Quincke's edema, anaphylactic shock); hepatic colic; diabetic insects (ketoacidotic, hypoglycemic), hyperthyroidism (thyrotoxic crisis); Hypothyroidism (hypothyroid coma); acute adrenal insufficiency and others.
8. Issuance of medical documentation

### **Content module II. The main duties and professional actions of the doctor in the surgical department of the hospital**

1. Clinical, laboratory and instrumental diagnosis of the main surgical diseases in hospital conditions.
2. Interpretation of data from laboratory tests of blood, urine, ultrasound of abdominal organs, blood vessels, radiography, ultrasound, CT, fibrogastroduodenoscopy, colonoscopy.
3. Diagnosis and choice of treatment tactics.
4. Primary surgical treatment of wounds. Peculiarities of assisting in the dressing room: wound care, drains, changing bandages, removing drains, removing sutures, debridement of the wound, surgical treatment of the purulent focus.
5. Provision of emergency care for bleeding, septic and hemorrhagic shocks; correction of water-electrolyte disorders and acid-base status, etc.
6. Preparation of medical documentation

### **Content module III. The main duties and professional actions of the doctor in the pediatric department of the hospital**

1. Examination of a healthy and sick child, assessment and correction of the child's nutrition in the first year of life.
2. Evaluation of clinical analyzes (general blood test in children of different ages, general urinalysis, urine analysis according to Zimnytskyi, urinalysis according to Nechiporenko, general analysis of feces, general analysis of sputum), biochemical analyzes (blood protein content and its fractions, alkaline phosphatase, cholesterol, AST, ALT, acute phase indicators, blood creatinine and urea, blood electrolytes, urine analysis for diastasis), serological reactions in autoimmune diseases.
3. Evaluation of fibrogastroduodenoscopy data with pH-metry, urease test results. ECG analysis.
4. Evaluation of spirometry, bronchoscopy, and echocardiography data. Evaluation of X-ray data of chest organs, digestive system, genitourinary system.
5. Diagnosis and provision of emergency care for children with convulsions, hyperthermic syndrome, exicosis and toxicosis in children of the first year of life, dizziness, collapse, edema of the lungs and larynx, bronchospasm, asthmatic status, heart rhythm disorders, heart failure, infectious and toxic shock, acute renal and liver failure, complications of vaccination and drug therapy (allergic reactions).
6. Preparation of medical documentation.

**Content module IV. The main duties and professional actions of the doctor in the maternity department of the hospital**

1. External obstetric examination of pregnant women, Leopold's techniques, measurements of the pelvis, determination of the true conjugate.
2. Establishing the term of pregnancy (according to the anamnesis and objective research).
3. Determination of the gestational age of the fetus and its weight.
4. Determination of the expected term of childbirth.
5. Physiological childbirth, postpartum period
6. Provision of obstetric care during childbirth and the postpartum period.
7. Determination of the condition of the newborn according to the Apgar scale. Primary care of a newborn.
8. Determination of the principles of treatment of pregnancy complications, childbirth, pathological conditions of the fetus (placental dysfunction, fetal distress, delayed fetal development, isoantigenic incompatibility of maternal and fetal blood, early gestosis, hypertensive disorders, preeclampsia, eclampsia, miscarriage, multiple pregnancy).
9. Providing emergency care for severe forms of preeclampsia and eclampsia, fetal distress, asphyxia of the newborn.
10. Interpretation of the results of clinical, laboratory and instrumental methods of examination of pregnant women, women in labour, fetus (ultrasound, auscultation, CTG, etc.) for detection complications of pregnancy, childbirth, pathological condition of the fetus.
11. Preparation of medical documentation in obstetrics.

**Annex 5. The protocol for evaluating practical skills, which are checked on FC from the content module "Main duties and professional actions of a doctor of a therapeutic hospital department"**

№	Abilities and practical skills	Grade in points	
1	Conducting a survey and physical examination of patients with the main diseases of the respiratory, digestive and endocrine systems.	2-5	
2	Conducting a survey and physical examination of patients with the main diseases of the respiratory, digestive and endocrine systems.	2-5	
3	Data evaluation of instrumental research methods: x-ray examination of the chest and abdominal organs, ECG, spirometry, sonography of the abdominal organs, fibrogastro-duodenoscopy, colonoscopy.	2-5	
4	Reasoning and formulation of clinical diagnosis.	2-5	
5	Interpretation of the general principles of treatment, primary and secondary prevention in the main diseases of the respiratory, digestive and endocrine systems.	2-5	
6	Emergency assistance in urgent situations (conditions) with acute respiratory failure (attack bronchial asthma); anaphylactic reactions (acute urticaria, Quincke's edema, anaphylactic shock); hepatic colic; diabetic insects (ketoacidotic, hypoglycemic), hyperthyroidism (thyrotoxic crisis); hypothyroidism (hypothyroid coma); acute adrenal	2-5	

	insufficiency and others		
	Total score		48-80

Teacher's signature \_\_\_\_\_

**Annex 6. The protocol for evaluating practical skills, which are checked on FC from the content module "Main duties and professional actions of a doctor of a surgery hospital department"**

№	Abilities and practical skills	Grade in points	
1	Evaluation of the data of anamnesis, physical examination: examination of the patient, palpation, percussion, auscultation, rectal examination.	2-5	
2	Analysis of laboratory and instrumental results studies (radiography, ultrasound, CT, fibrogastro-duodenoscopy, colonoscopy).	2-5	
3	Justification and formulation of the clinical diagnosis, differential diagnosis of diseases of the abdominal cavity.	2-5	
4	Determination of the plan for conservative and operative treatment depending on pathogenetic factors and the severity of the patient's condition.	2-5	
5	Peculiarities of assistance during emergency and planned operations.	2-5	
6	Peculiarities of assistance in the dressing room: wound care, drains, dressing change, drain removal, suture removal, wound debridement, surgical treatment of purulent foci.	2-5	
7	Providing emergency care for bleeding, septic and hemorrhagic shock; correction of water-electrolyte disorders and acid-base status, etc.		
	Total score		48-80

Teacher's signature \_\_\_\_\_

**Annex 7. The protocol for evaluating practical skills, which are checked on FC from the content module "Main duties and professional actions of a doctor of a pediatrics hospital department"**

№	Abilities and practical skills	Grade in points	
1	The ability to conduct an examination of patients, justification and formulating a diagnosis, writing a medical history.	2-5	
2	Measurement of blood pressure on the arms and legs.	2-5	
3	Evaluation of clinical tests (general blood test in children of different ages, general urinalysis, urine analysis according to Zimnytskyi, urinalysis according to Nechiporenko, general analysis of feces, general analysis of sputum), biochemical analyzes (blood protein content and its fractions, alkaline phosphatase, cholesterol, AST, ALT, acute phase indicators, creatinine and blood urea, blood electrolytes, urine analysis for diastasis), serological reactions in autoimmune diseases.	2-5	

4	ECG analysis.	2-5	
5	Evaluation of fibrogastroduodenoscopy data with pH-metry, urease test results.	2-5	
6	Evaluation of spirometry, bronchoscopy, echocardiography data.	2-5	
7	Evaluation of X-ray data of chest organs, digestive system, genitourinary system.	2-5	
8	Diagnosis and provision of emergency care to children with convulsions, hyperthermic syndrome, exicosis and toxicosis in children of the first year of life, dizziness, collapse, edema of the lungs and larynx, bronchospasm, asthmatic status, heart rhythm disorders, heart failure, infectious-toxic shock, acute renal and liver failure, complications of vaccination and drug therapy (allergic reactions).	2-5	
	Total score		48-80

Teacher's signature \_\_\_\_\_

**Annex 8. The protocol for evaluating practical skills, which are checked on FC from the content module "Main duties and professional actions of a doctor of a maternity hospital department"**

№	Abilities and practical skills	Grade in points	
1	External obstetric examination of pregnant women, measurement of pelvic dimensions, determination of true conjugate, Solovyov index, Michaelis rhombus.	2-5	
2	Determination of the term of pregnancy (according to the anamnesis and objective research).	2-5	
3	Determination of the gestational age of the fetus and its weight.	2-5	
4	Determination of the estimated date of birth.	2-5	
5	Interpretation of the results of clinical, laboratory and instrumental methods of examination of pregnant women, childbirth, fetus (ultrasound, auscultation, CTG, etc.) for detecting complications of pregnancy, childbirth, pathological condition of the fetus.	2-5	
6	Physiological childbirth, postpartum period.	2-5	
7	Determination of the principles of treatment of complications of pregnancy, childbirth, pathological conditions of the fetus (placental dysfunction, fetal distress, delayed fetal development, isoantigenic incompatibility of maternal and fetal blood, early gestosis, hypertensive disorders, preeclampsia, eclampsia, miscarriage, multiple pregnancy).	2-5	
8	Determination of the condition of the newborn according to the Apgar scale. Carrying out the newborn's primary care.	2-5	
9	Providing emergency care for eclampsia, fetal distress, asphyxia of a newborn.	2-5	

Total score	48-80
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### 7. Themes of the Lectures

Study curriculum of the discipline does not include lecture material.

### 8. Themes of Practical Classes

Study curriculum of the discipline does not include practical classes.

### 9. Thematic Plan for Students' Independent Study

№	Theme	Number of hours
	<b>Content module I: The main duties and professional actions of a doctor in a therapeutic department of a hospital</b>	
1	The principles of organizing the provision of planned and urgent therapeutic care in Ukraine.	10
2	Survey and physical examination of patients with major diseases of respiratory, digestive organs, and endocrine system.	10
3	Interpretation of laboratory and instrumental methods of research in the clinic of internal medicine.	10
4	Justification and formulation of the diagnosis in the main cases of diseases of respiratory and digestion organs, and endocrine system.	10
5	Treatment, primary and secondary prevention for the main diseases of the respiratory, digestive organs and endocrine system.	10
6	Provision of emergency care in the clinic of internal medicine.	10
7	Principles of ethics and deontology in the practice of the doctor of the therapeutic department.	5
8	Preparation for the final control	10
	<b>Total:</b>	<b>75</b>
	<b>Content module II. The main duties and professional actions of the doctor in the surgical department of the hospital</b>	
1	Principles of organization of planned and emergency surgical care in Ukraine.	8
2	Clinic, diagnosis and treatment tactics of surgical pathology in hospital conditions.	8
3	Laboratory-instrumental diagnostics in surgery.	8
4	Provision of emergency medical care in case of emergencies surgical diseases.	8
5	Principles of ethics and deontology in the practice of a doctor in a surgical department.	8
6	Preparation for the final control	5
	<b>Total:</b>	<b>45</b>
	<b>Content module III. The main duties and professional actions of the doctor in the pediatric department of the hospital</b>	
1	Principles of organization of medical care for children in Ukraine, basics of Ukrainian legislation on children's health care. Principles of ethics and deontology in the practice of a doctor in a pediatric department.	13

2	Clinical diagnosis of the main children's diseases in the conditions of a children's hospital.	13
3	Laboratory-instrumental diagnosis of the main children's diseases.	13
4	Tactics of treatment of the main children's diseases in the conditions of a children's hospital.	13
5	Provision of emergency medical care in the conditions of a children's hospital.	13
6	Preparation for the final control	10
	<b>Total:</b>	<b>75</b>
	<b>Content module IV. The main duties and professional actions of the doctor in the maternity department of the hospital</b>	
1	Principles of organization of medical care for pregnant women, women in labor and women in labor in Ukraine. Fundamentals of Ukrainian legislation on maternal and child health care. Diagnosis of early and late pregnancy.	8
2	Management of physiological childbirth and the postpartum period.	8
3	Clinical, laboratory-instrumental diagnostics in obstetrics.	8
4	Diagnosis and tactics of treatment of complications of pregnancy, childbirth, pathological conditions of the fetus in the conditions of an obstetric department (multiple pregnancy, placental dysfunction, fetal distress, retardation of fetal development, isoantigenic incompatibility of the mother's blood and fetus, early gestosis, hypertensive disorders, preeclampsia, eclampsia, miscarriage).	8
5	Provision of emergency medical care in obstetrics. Principles of ethics and deontology in the practice of a maternity ward doctor.	8
6	Preparation for the final control	5
	<b>Total:</b>	<b>45</b>
	<b>Total hours per discipline:</b>	<b>240</b>

## 10. Methodical Provision

Homozova O.A., Husiev V.M., Gyulmamedov P.F., Yermolaieva M.V., Zharikov S.O., Loskutova I.V., Olshevska O.V., Khapchenkova D.S., Chernyshova O.E Methodical guidelines on conducting industrial medical practice of the 4th year students of the medical faculty of higher medical education – Kropyvnytskyi, 2024. – 19 p.

## 11. Recommended Resources

1. Obstetrics and gynecology: in 2 books. Book 1. Midwifery: textbook / V.I. Hryshchenko, M.O. Shcherbina, B.M. Ventskiivskyi et al. — 4th edition, K.. Medicine, 2020. - 424 p.
2. Propaedeutics of internal medicine. Collection of clinical lectures: the educational and visual guide: in two parts. Part 1. / T.A. Khomazyuk. – Dnipro: Gerda, 2019. – 372 p.
3. Propedeutics of Internal Medicine : textbook / O.M. Kovalyova, T.V. Ashcheulova. – 5th ed. – Vinnytsia : Nova Knyha, 2020. Pt. 1 : Diagnostics. – 2020. – 424 p.

4. Anemic syndrome: modern principles of diagnosis and treatment: manual / Abrahamovych O.O., Petrukh A.V., Zayats Z.E. etc. - Lviv: Kvant, 2007. - 139 p.
5. Internal diseases: in 2 parts. Part 1. Chapters 1-8: textbook / L.V. Hlushko, S.V. Fedorov, I.M. Skrypnyk and others. - Kyiv, Medicine., 2019. - 680 p.
6. Internal diseases: in 2 parts. Part 2. Chapters 9-24: textbook / L.V. Hlushko, S.V. Fedorov, I.M. Skrypnyk and others. /- Kyiv, Medicine., 2019. – 584s + 6 books incl
7. Internal medicine. In 3 vols. Vol. 1 / By editor. Prof. K.M. Amosova. - K.: Medicine, 2008. - 1056 p.
8. Internal medicine. In 3 volumes, T. 2 / A.S. Svintsytskyi, L.F. Konopliova, Y.I. Feshchenko, etc.; Under the editorship Prof. K.M. Amosova. - K.: Medicine, 2009. - 1088 p.
9. Internal Medicine: General Practitioner's Advisor: Study Guide. / A.S. Svintsytskyi, O.O. Abrahamovych, P.M. Bodnar and others; Under the editorship Prof. A.S. Svintsytsky - VSV "Medicine", 2014. - 1272 p. + 16s. colored incl.
10. Differential diagnosis of the main syndromes in diseases of the respiratory organs and additional materials on phthiology: Educational manual / Ed. Prof. L.D. Todoriko - BSMU Chernivtsi: Medical University, 2011. - 320 p.
11. Clinical-radiological atlas for the diagnosis of lung diseases / [L.D. Todoriko, I.O. Semyaniv, V.P. Shapovalov, A.V. Boyko]; under the editorship Prof. L.D. Todoriko. – Chernivtsi: Medical University, 2013. – 342 p.
12. Emergency medical care: Education. manual / K.M. Amosova, B.G. Bezrodnyi, O.A. Bur'yanov, B.M. Ventskiivskyi, etc.; Under the editorship F.S. Glumchera, V.F. Moskalenko. - K.: Medicine, 2006. - 632 p.
13. Perederii V.G., Tkach S.M. Basics of internal medicine. In 3 volumes. Volume 1. "New book", 2009. - 640 p.
14. Perederii V.G., Tkach S.M. Basics of internal medicine. In 3 volumes. Volume 3. "New book", 2010. - 1006 p.
15. Practicum in internal medicine: teaching. village / K.M. Amosova, L.F. Konoplyova, L.L. Sydorova, G.V. Mostbauer et al. - K.: Ukrainian Medical Bulletin, 2012 - 416 p.
16. Svintsytskyi A.S., Yaremenko O.B., Puzanova O.G., Khomchenkova N.I. Rheumatic diseases and syndromes. – K.: "Book Plus", 2006. – 680 p.
17. I.M. Skrypnyk // Gastroenterology: Textbook in 2 volumes. - Vol. 2 / Edited by N.V. Kharchenko, O.Ya. Babaka: Central Committee of the Ministry of Health of Ukraine. - Kropyvnytskyi PP "Polium", 2017. - P. 147-191.
18. Modern classifications and principles of formulating diagnoses in the clinic of internal diseases: manual / edited by O.O. Abrahamovych. - Lviv: PP "Kvant", 2005. - 322 p.
19. Modern approaches to childbirth and the postpartum period in pathological pregnancy. Ed. Gromovoi A.M., Nesterenko L.A., Poltava, 2016.
20. Todoriko L.D., Boyko A.V. Basic syndromes and methods of examination in pulmonology and phthiology: Study guide for independent work of senior year students of higher medical educational institutions III-IV levels of accreditation. - Kyiv: Medknyga, 2013. - 432 p.
21. Basics of pediatrics according to Nelson: translation of the 8th Eng. edition: in 2 volumes. Volume 1 / Karen J. Marcadante, Robert M. Kligman. - K.: VSV "Medicine", 2019. - XIV, 378 p. 1. Essentials of Human Diseases and Conditions: textbook / M.Sh. Freizer, T. Fuqua. – Elsevier, 2021. – 7<sup>th</sup> edition. – 848 p.

22. 2. The Physician Assistant Student's Guide to the Clinical Year: Internal Medicine : textbook / D. Knetchel, D. Opacic. – Springer Publishing Company, 2019. – 368

## 12. Additional Resources

1. Official website of DNMU  
<https://dnmu.edu.ua/praktyka/>
2. National Library named after V.I. Vernadsky  
[Національна бібліотека України імені В. І. Вернадського \(nbuv.gov.ua\)](http://nbuv.gov.ua)
3. The World Society of Emergency Surgery  
[World Society of Emergency Surgery: studies and statistics \(wses.org.uk\)](http://www.wses.org.uk)
4. <http://www.gastro.org.guidelines/>
5. PubMed <http://pubmed.ncbi.nlm.nih.gov/>
6. Сайт IRCAD <http://websurg.com/>
7. <http://ginasthma.org/>
8. <http://goldcopd.org/>
9. State Expert Center of the Ministry of Health of Ukraine. Standards & Clinical Guidelines. Available at: [<https://www.dec.gov.ua/cat\\_mtd/galuzevi-standarti-ta-klinichni-nastanovi/>](https://www.dec.gov.ua/cat_mtd/galuzevi-standarti-ta-klinichni-nastanovi/)
10. Ministry of Health of Ukraine. Current Care Guidelines Duodecim Medical Publications Ltd. Available at: [<https://guidelines.moz.gov.ua/>](https://guidelines.moz.gov.ua/)