

**PLAN OF LECTURES**  
 for the 3rd year students **of the faculty of foreign students**  
 for the fall semester 2021-2022 academic year

Module I  
**Direct research methods**  
**(in situ methods) in propaedeutic practice**

<p>1. Introduction. The object and tasks of propedeutics of internal diseases. The concept of semiotics and diagnosis and diagnostics. The General plan of examination of the patient. Basic and additional (laboratory and instrumental methods of research of the patient. The concept of medical deontology. The history of the disease. The value of case history as a scientific and medical and juristic document.</p> <p>Research methods the patient. Questioning of the patient. Features of psychological treatment approach. Methods and methodology of questioning. Medical ethics and questioning. The main fragments of questioning (complaints, medical history, life and work history). Heredity. Past diseases. Bad habits. Special aspects of questioning in the pathology of the circulatory system and respiratory system. The pathogenesis of complaints.</p>	Docent Chumakova Natalia Sergeevna
<p>2. Methods of research of the patient. Examination. General examination, principles, methods.</p>	Docent N.S. Chumakova
<p>3. Methods of research of the patient. Palpation. General principles, methods. Palpation of the thorax, heart, abdomen, liver, spleen, kidney, lymph nodes, thyroid gland.</p>	Docent N.S. Chumakova
<p>4. Methods of research of the patient. Percussion. The history of development. General principles, methods. Percussion of the chest, heart, abdomen, liver, spleen, in norm and pathology.</p>	Docent N.S. Chumakova
<p>5. Methods of research of the patient. Auscultation. The history of development. General principles. Technique. Auscultation of the lung in norm and pathology.</p>	Docent N.S. Chumakova
<p>6. Methods of research of the patient. Auscultation. Auscultation of the heart. Technique. The tones (the mechanism of formation, changes in pathology).</p>	Docent N.S. Chumakova
<p>7. Methods of research of the patient. Auscultation. Auscultation of the heart. Cardiac murmur (the mechanism of formation, the diagnostic value).</p>	Docent N.S. Chumakova

Head of the Propedeutics of internal diseases  
 Department, professor

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**PLAN OF PRACTICAL CLASSES**  
for the 3rd year students **of the faculty of foreign students**  
for the fall semester 2021-2022 academic year

**Module I**

**Direct research methods  
in propaedeutic practice**

1. The familiarity with clinic. Major domestic therapeutic schools. Questions of medical ethics and deontology. The procedure and the way of hospitalization. The structure of the therapeutic Department. The care of the sick patients. The mode of the day. Scheme of case history. The object and tasks of propedeutics of internal diseases. The questioning of the pulmonary patient, the main complaints and its pathogenesis: cough, sputum production, chest pain, shortness of breath, asthma, hemoptysis, voice change.
2. Questioning of patients with heart diseases. The main complaints and their pathogenesis: pain in the heart, dyspnoea, cardiac asthma, heartbeat (palpitations), cough, hemoptysis. A brief history of the disease. General examination of the patient. Local examination of systems and organs.
3. Palpation of the pulmonary, cardiac, renal, endocrine patients, patients with diseases of the gastrointestinal tract. Palpation of lymph nodes, thyroid gland, breast (rigidity, soreness, vocal fremitus), apical, cardiac impulsion, pulse, abdomen, liver, kidneys, spleen. Measurement of blood pressure.
4. Methods and techniques of percussion. Classification of percussion sounds. Percussion of the lungs (comparative, topographical).
5. Percussion of the heart: the borders of relative and absolute dullness, the diameter of the heart (heart breadth), width of vascular pedicle. Percussion of the liver by Kurlov's. Percussion of the spleen sizes.
6. Methods and techniques of auscultation. Auscultation of the lungs (historical background, direct, indirect), comparative auscultation of the lungs. Basic and additory respiratory sounds in health and disease. Bronchophony.
7. Auscultation of the heart. Heart tones basic sounds and extra heart sounds. Basic properties of tones: strength of tone, sound timbre, splitting of heart sounds, reduplication of heart tones, change in pathology.
8. The classification of a heart murmur, mechanism of formation, diagnostic value.

**Module II**

**Laboratory and instrumental methods of research**

1. Electrocardiogram (ECG tracing) (principle of method, normal ECG, the heart axis, hypertrophy of the ventricles and Atria).
2. ECG (arrhythmias: sinus, premature beats (extrasystole), paroxysmal tachycardia, atrial flutter and atrial fibrillation and ventricular).
3. ECG (Blockades: sinoauricular, atrioventricular, His band, intraventricular conduction trouble (asequence)).
4. ECG during myocardial infarction (stage, localization, depth distribution).
5. Questioning and examination of patients with pathology of the circulatory system. Instrumental research methods.
6. Questioning, examination of a pulmonary patient. Determination of the function of external respiration. Spirometry. Spirography. Pneumotachometry. X-ray, endoscopic methods of research. Computed tomography. Analysis of sputum and pleural fluid.
7. Questioning and examination of patients with diseases of the digestive system. Laboratory-instrumental and radiological methods of research.
8. Questioning and examination of patients with pathology of the urinary system. Laboratory-instrumental and radiological methods of research. The final lesson on laboratory and instrumental methods of research. Final testing.

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**CONTROL QUESTIONS FOR PRACTICAL STUDIES  
ON PROPEDEUTICS OF INTERNAL DISEASES  
for the 3rd year students of the faculty of foreign students  
for the fall (autumn ) semester 2021 - 2022 academic year**

**Module 1**

**Lesson 1**

1. The division of the clinic of internal diseases to propedeutics, faculty and hospital.
2. Tasks of propedeutic therapeutic school.
3. What is diagnostics, and its component parts.
4. What is semiotics (semiology), the syndrome?
5. What is the diagnosis?
6. The procedure of medical patient's hospitalization?
7. Adherence to ethical standards in the health facility. Medical deontology.
8. What diagnostic methods of examining the patient are exist?
9. The main sections of the case history scheme (history of the disease)
10. Diagnostic value of questioning and its parts: passport data, complaints, history of disease and life.
11. The questioning of the pulmonary patient, main complaints and their pathogenesis: cough, sputum production, chest pain, shortness of breath, asthma, hemoptysis, voice change.

**Lesson 2**

1. Types of examination of the patients.
2. What does usual common examination of the patient include?
3. What is the severity level of the patient's condition?
4. Describe the different types of consciousness.
5. Body constitution types.
6. Assessment of the skin condition
7. Local inspection (inspection of separate parts of body (head, face, neck, chest, abdomen, upper and lower limbs). The symptoms revealed.

**Lesson 3**

1. What is palpation? Definition of this method of physical examination.
2. The technique of palpation of lymph nodes, thyroid gland.
3. The technique of palpation of the chest, its diagnostic value: tenderness, rigidity, vocal fremitus.
4. Palpation of the apex impulse and cardiac beat, the pulse, pulse properties.
5. Clinical value of vocal fremitus determination—strengthening, weakness, lack.
6. The technique of superficial and deep palpation of the abdomen.
7. Method of determining the free liquid in the abdominal cavity.
8. The technique of palpation of the liver, spleen, kidneys.

**Lesson 4**

1. The definition of the method of percussion.
2. Physical fundamentals of percussion.
3. Methods of percussion.
4. The main rules for the percussion.
5. Basic percussion sounds their characteristic.
6. The technique of comparative percussion of the lungs.
7. The methodology of topographic percussion of the lungs.
8. Determination of height of standing on the tops of the lungs and width Kernig's fields.
9. The definition of the lower borders of the lungs.
10. Determination of the mobility of the lower pulmonary region.

**Lesson 5**

1. The main rules for the percussion of the heart.
2. The concept of relative cardiac dullness.
3. The conception of absolute cardiac dullness. Its borders in normal. Definition technique.

4. Percussion definition of the vascular pedicle width and the heart breadth (diameter of the heart).
5. The method of determining the three dimensions of the liver by Kurlov and sizes of the spleen.

### **Lesson 6**

1. Auscultation as a method of physical examination.
2. The history of auscultation. What is mediated, immediate (direct) auscultation?
3. Method of comparative auscultation of the lungs.
4. The main respiratory sounds in health and disease.
5. Side (adverse) respiratory sounds (noises) (rales, crepitation, pleural fremitus). The mechanism of their formation.
6. The concept of bronchophony.

### **Lesson 7**

1. The mechanism of the 1 and 2 tones of the heart formation, auscultation points.
2. Tone's of heart changes in norm and pathology (strength of tone, sound timbre, splitting of heart sounds, reduplication of heart tones).
3. The concept of rhythm "quail" (fout-ta-ta-rou) and "gallop" rhythm, a «tic-tac rhythm» rhythm, embryocardia

### **Lesson 8**

1. The classification of a heart murmur, the mechanism of occurrence.
2. The concept of organic and cardiac murmur. Their differentiation and diagnostic value.
3. The best places of auscultation, their construction.

## **Module 2**

### **Lesson 9**

1. Electrophysiological basis of the electrocardiogram (ECG tracing)
2. Cardiac conduction system.
3. ECG- leads and locations of electrodes.
4. In which standard and precordial leads bioelectric currents of the different parts of the heart are recorded?
5. Study the elements of a normal ECG and its changes in pathology.
6. Determination of the rhythm frequency on an ECG.
7. Signs of sinus rhythm on ECG.
8. The concept of the electrical axis of the heart.
9. ECG-signs of hypertrophy of the atria and ventricles.

### **Lesson 10**

1. An electrocardiogram (ECG) diagnostics of sinus arrhythmias.
2. What are ectopic arrhythmias?
3. ECG diagnostics of Ectopic heartbeat (extrasystole), atrial fibrillation and atrial flutter, paroxysmal tachycardia.

### **Lesson 11**

1. Disorders of the conduction system of the heart. Blockades. Classification.
2. ECG-signs of sinoaricular, intraatrial, auriculoventricular (AV) and intraventricular block.
3. Degrees of AV block, their differentiation in the analysis of ECG.

### **Lesson 12**

1. ECG signs of myocardial infarction.
2. Phases of myocardial infarction as determined by ECG analysis.
3. The concept of anterior, inferior and posterior myocardial infarction. ECG – signs of transmural and subendocardial myocardial infarction, Q- positive and Q- negative myocardial infarction.

### **Lesson 13**

1. Complaints of patients with pathology of the circulatory system (chest pain, shortness of breath, arrhythmias, edema). The pathogenesis.
2. Examination of cardiac patients (common and local), the symptoms detected during the examination.

3. Functional methods of research of patients with cardiovascular diseases. ECG, Echocardiography, x-ray, radionuclide method, tomography and other methods.

#### **Lesson 14**

1. Complaints of lung patients: cough, hemoptysis, shortness of breath, chest pain. Pathogenesis.
2. The main symptoms detected during the examination of lung patients (cyanosis, changes in the shape of the chest, respiration, cardiac shock, the symptom of "drumsticks" and "watch glasses", etc.).
3. Determination of the function of external respiration. Spirometry, spirography, pneumotachometry.
4. X-ray research methods. Tomography.
5. The concept of bronchoscopy, pleural puncture, lung and pleural biopsy. Diagnostic value.
6. Sputum analysis. Clinical assessment.

#### **Lesson 15**

1. Complaints of patients with gastrointestinal diseases. Pathogenesis.
2. General and private examination of these patients.
3. X-ray and endoscopic methods of examination.
4. Examination of gastric juice and duodenal contents. Clinical assessment. Analysis of feces.

#### **Lesson 16**

1. Complaints of patients with pathology of the urinary system.
2. General and private examination data for this pathology.
3. Functional research methods (Zimnitsky test, for dilution and concentration, Rehberg).
4. Laboratory methods of research (general urinalysis, sample according to Nechiporenko, Addis-Kakovskiy).
5. General ideas about X-ray and ultrasound studies.
6. Control of knowledge on laboratory and instrumental research methods.

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