

MINISTRY OF HEALTH OF UKRAINE  
KHARKIV NATIONAL MEDICAL UNIVERSITY  
Department of Propaedeutics of Internal Medicine №1,  
Fundamental of Bioethics and biosafety  
Academic year 2021 -2022

**SYLLABUS OF THE EDUCATIONAL COMPONENT**  
**« FUNDAMENTALS OF PULMONOLOGY »**

Normative educational component

The form of education is full-time

Area of knowledge 22 "Health care"

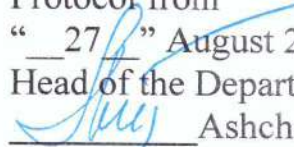
Specialty (specialization) 222 "Medicine" - masters

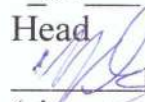
Educational-professional program (educational-scientific program) of the second (master's) level of higher education

Course   IV  

The syllabus of the discipline was approved at the meeting of the department of Propaedeutics of Internal Medicine №1, Fundamental of Bioethics and biosafety

Approved by the methodical commission on problems of therapeutic profile of KhNMU

Protocol from  
“   27   ” August 2021 №   16    
Head of the Department  
 Ashcheulova T.V.  
(signature) (surname and initials)

Protocol from  
“   31   ” August 2021 №   1    
Head  
 professor Kravchun P.G.  
(signature) (surname and initials)

**DEVELOPERS:**

1. Ashcheulova Tatiana Vadimovna, MD, PhD, DMs, Professor, Head of the Department of Fundamentals of Internal Medicine N1, Fundamentals of Bioethics and Biosafety

2. Gerasimchuk Nina Nikolaevna – MD, PhD, Associate Professor of the Department of Fundamentals of Internal Medicine N1, Fundamentals of Bioethics and Biosafety, teacher of the discipline ‘Fundamentals of pulmonology’

**INFORMATION ABOUT TEACHERS**  
**TEACHING THE EDUCATIONAL COMPONENT**

1 **Ashcheulova Tatiana Vadimovna**, MD, PhD, DMs, Professor, Head of the Department of Fundamentals of Internal Medicine N1, Fundamentals of Bioethics and Biosafety specialization "Therapy", "Cardiology", "Pulmonology".

Professional interests, links to the teacher 's profile (on the university website, department, in the Moodle system and more. <http://pim1.kharkov.ua>

Contact phone +380689941208;

Corporate mail of the teacher \_ [tv.ashcheulova@knmu.edu.ua](mailto:tv.ashcheulova@knmu.edu.ua)

**Consultations:** schedule and venue according to the schedule of the department.

**Online consultations:** system, Moodle system ZOOM schedule and venue by prior arrangement with the teacher.

**Location:** Gagarin Avenue 137; Department of Fundamentals of Internal Medicine N1, Fundamentals of Bioethics and Biosafety,  
Rooms for practical classes are located on the 1-th floor, room 4.

2. **Gerasimchuk Nina Nikolaevna**, MD, PhD, Associate Professor of the Department of Fundamentals of Internal Medicine N1, Fundamentals of Bioethics and Biosafety, specialization "Therapy",

Professional interests, links to the teacher 's profile (on the university website, department, in the Moodle system and more. <http://pim1.kharkov.ua>

Contact phone ++380961206872;;

Corporate mail of the teacher \_ [nm.herasymchuk@knmu.edu.ua](mailto:nm.herasymchuk@knmu.edu.ua)

**Consultations:** schedule and venue according to the schedule of the department.

**Online consultations:** system, Moodle system ZOOM schedule and venue by prior arrangement with the teacher.

**Location:** Gagarin Avenue 137; Department of Fundamentals of Internal Medicine N1, Fundamentals of Bioethics and Biosafety,  
Rooms for practical classes are located on the 1-th floor, room 3.

## INTRODUCTION

**Syllabus of the educational component «Fundamentals of pulmonology»** compiled in accordance with the educational-professional program (hereinafter - EPP) "Medicine" and the Standard of Higher Education of Ukraine (hereinafter - the Standard), the second (master's) level, the technical branch of knowledge - 22 Healthcare, specialty 222 "Medicine"

**Description of the discipline** Fundamentals of pulmonology is one of the first disciplines of the clinical stage of undergraduate training of a doctor, during the study of which students learn the methods of diagnosis of internal diseases. Thus, the basics of pulmonology are an educational clinical discipline that studies the methods and techniques of clinical examination of the patient, features of professional communication between the doctor and the patient, subjective and objective manifestations of diseases (symptoms and syndromes), causes and mechanisms of their origin and development (semiology). diagnosis.

The study of the discipline takes place in two logical stages - mastering the basic methods of physical, instrumental and laboratory examination of the patient, after which students master the basic symptoms and syndromes of the most common diseases of the bronchi and lungs rules of diagnosis

The organization of the educational process is carried out according to the requirements of the European credit transfer and accumulation system, based on a combination of learning technologies by sections and credit assessment - units of measurement of student workload required to master the discipline or its section.

**The subject of study** of the discipline "Fundamentals of Pulmonology" is a set of theoretical and practical issues aimed at mastering the basic methods of examination of the patient in the clinic of internal medicine, namely pulmonology and the rules of syndrome diagnosis of the most common respiratory diseases.

**Interdisciplinary links:** according to the sample curriculum, the study of the discipline "Fundamentals of Pulmonology" is carried out in VIII-IX semesters, when students acquire relevant knowledge of basic basic disciplines: medical biology, medical and biological physics, human anatomy, physiology, biological and bioorganic chemistry, medical chemistry, histology, cytology and embryology, microbiology, virology and immunology, with which the program of basic pulmonology is integrated. In turn, the basics of pulmonology forms the basis for students to study the following clinical disciplines - internal medicine, general practice (family medicine), medical psychology, infectious diseases, oncology, anesthesiology and intensive care, which provides "vertical" integration with these disciplines and skills. from the main methods of examination of the patient in the process of further training and in professional activity.

**Prerequisites and postrequisitions.** The study of the discipline involves the prior mastering of disciplines in medical biology, medical and biological physics, human anatomy, physiology, biological and bioorganic chemistry, medical chemistry, histology, cytology and embryology, microbiology, virology and immunology in higher education. The main provisions of the discipline should be applied in the study of professional disciplines.

## 1. THE PURPOSE AND OBJECTIVES OF THE DISCIPLINE

### 1.1. The purpose of studying the discipline "Fundamentals of Pulmonology"

is to form in the student the basics of clinical thinking and acquisition of professional competencies of examination of the patient and assessment of the main manifestations of respiratory diseases in accordance with the principles of medical ethics and deontology.

### 1.2. The main tasks of studying

- Mastering by the student the theoretical knowledge necessary for detection of respiratory diseases
- Mastering the practical techniques and methods of physical and laboratory-instrumental examination of patients
- Assimilation of general methodological approaches to clinical examination of the patient
- Diagnosis of certain diseases of the human bronchi and lungs with their typical manifestations
- Formation of students' moral, ethical and deontological qualities in professional communication with the patient.

**1.3. Competences and learning outcomes**, the formation of which is facilitated by the discipline.

**1.3.1.** The study of the discipline provides students with the acquisition of competencies:

**integral:** ability to solve typical and complex specialized tasks and practical problems in professional activities in the field of health care, or in the learning process, which involves research and / or innovation and is characterized by complexity and uncertainty of conditions and requirements.

**Common:**

1. Ability to abstract thinking, analysis and synthesis.
2. The ability to learn and master modern knowledge.
3. Ability to apply knowledge in practical situations.
4. Knowledge and understanding of the subject area and understanding of professional activity.
5. Ability to adapt and act in a new situation.
6. Ability to make informed decisions.
7. Ability to work in a team.
8. Interpersonal skills.
9. Ability to communicate in the state language both orally and in writing.
10. Ability to communicate in a foreign language
11. Skills in the use of information and communication technologies.
12. Definiteness and perseverance in terms of tasks and responsibilities.
13. The ability to act socially responsibly and consciously.
14. The desire to preserve the environment.
15. 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 syndromic diagnosis of the disease.
4. Ability to diagnose emergencies.
5. Skills in providing emergency medical care.
6. Skills of medical manipulations.
7. Ability to keep medical records.
8. Ability to carry out sanitary and hygienic and preventive measures.
9. Ability to ensure the required mode of stay of the patient in the hospital in the treatment of diseases.

**1.3.2.** The study of the discipline provides students with the acquisition of the following **program learning outcomes:**

**PLO 1** - acquisition by a person of general and special fundamental and professionally-oriented knowledge, skills, abilities, competencies necessary for the performance of typical professional tasks related to his / her activity in the medical field in the relevant position

**PLO 2** - knowledge of psychophysiological features of the person, human health, health support, disease prevention, human treatment, public health;

**PLO 3** - ability to apply the acquired knowledge, skills and understanding to solve typical problems of the doctor, the scope of which is provided by lists of syndromes and symptoms, diseases, emergencies, laboratory and instrumental research, medical manipulations

**PLO 4** - collection of patient information

Application of knowledge and understanding:

**PLO 5** - evaluation of survey results, physical examination, laboratory and instrumental research data

**PLO 6** - establishing a preliminary clinical diagnosis of the disease

**PLO 8** - determination of the required diet, mode of operation and rest when dicking diseases

**PLO 9** - determination of tactics of contingent contingent of persons subject to dispensary supervision

**PLO 10** - diagnosing emergencies, determining the tactics of emergency medical care

**PLO 11** - carrying out sanitary and hygienic and preventive measures

**PLO 15** - performance of medical manipulations

**PLO 17** - maintenance of medical documentation, processing of state, social and medical information

Formation of judgments

**PLO 18** - the ability to assess the state of human health and provide its support taking into account the impact of the environment and other health factors

**PLO 20** - the ability to apply the acquired knowledge of the existing health care system to optimize their own professional activities and participate in solving practical problems of the industry

**PLO 21** - the formation of a specialist with appropriate personal qualities, who adheres to the code of ethics of the doctor

**1.3.3.** The study of the discipline provides students with the following **social skills (Soft skills)**: communication (implemented through: method of working in pairs and groups, brainstorming, self-presentation method), teamwork (implemented through: project method, openwork saw), conflict management (implemented through: dramatization method, game methods), time management (implemented through: project method, group work, training), leadership skills (implemented through: group work, project method, self-presentation method).

The graduate during the period of study acquires communication skills, develops leadership skills, learns to take responsibility and work in critical conditions, resolves pedagogical situations and conflicts, is able to work in a team, manage their time, think logically and systematically, has creative approaches to solve the problem.

## 2. Discipline information

Name of indicators	Area of knowledge, direction of training, educational qualification level	Characteristic of the discipline	
		full-time education	
Number of credits – 3	Training direction: 22 Health Care (code and name)	Selective	
The total number of hours - 90	Specialty: 222 «Medicine» (code and name)	<b>Year of the education:</b>	
		4-th	
		<b>Semester</b>	
		8-th	
Hours for full-time study: classroom - 20 hours independent student work - 70 hours	Education level: Second (Master's level) EPP "Medicine"	<b>Lectures</b>	
		0 hours	
		<b>Practical classes</b>	
		20 hours.	-
		<b>laboratory work - 0 hours</b>	
		<b>Independent work - 70 hours.</b>	
		<b>Individual lessons: - 0 hours.</b>	
<b>Type of control:</b> Current control Credit			

## 2.1 The content of the discipline

**2.2.1 Lectures are not provided**

**2.2.2 Seminars are not provided**

### 2.2.3 Practical classes

№ 3/π	Names of the topics	Number of hours	Methods training	Forms control
<b>Discipline section 1. The main methods of examination of patients with respiratory disease.</b>				
1.	<p>Inquiry and general inspection of the patients with respiratory organs pathology.</p> <p>General inspection of the patients. Inspection of the chest.</p> <p>Palpation of the chest.</p> <p>Percussion as method of physical examination of the lungs. Comparative percussion of the lungs technique. Topographic percussion of the lungs.</p>	5	<p>business game, simulation of processes and situations, virtual consultation, standardized patient,</p>	<p>Current control: oral examination (individual and frontal); test control;</p>
2.	<p>Auscultation as method of physical examination of the lungs. Auscultation of the lungs technique. The main respiratory sounds.</p> <p>Auscultation of the lungs: additional respiratory sounds (rales, crepitation, pleural friction sound).</p> <p>Laboratory sputum and pleural fluid analysis.</p> <p>Instrumental methods of respiratory organs examination</p> <p>Curation of patients.</p>	5	<p>simulation game, modeling of processes and situations, virtual consultation, standardized patient,)</p>	<p>Intermediate control of knowledge - final lesson; test control.</p>
<b>Discipline section 2. The main symptoms and syndromes in diseases of the respiratory system.</b>				



3.	<p>The syndrome of the pulmonary tissue consolidation (SPTC)</p> <p>Pneumonia: symptoms and syndromes based on clinical and instrumental and laboratory methods.</p> <p>Pulmonary artery thromboembolism (PE), pulmonary infarction; pulmonary edema due to left ventricular heart failure.</p> <p>Pleurisy. Etiology and pathogenesis, classification of pleurisy.</p> <p>Syndrome of increased airiness of the lung tissue.</p>	5	<p>story-explanation, illustration, presentation, business game, modeling of processes and situations, method "Brainstorming", virtual consultation, standardized patient.</p>	<p>Current control: oral examination (individual and frontal); written survey; test control.</p>
4.	<p>Bronchial obstruction syndrome (broncho-obstructive syndrome).</p> <p>Chronic obstructive pulmonary disease (COPD).</p> <p>Acute and chronic bronchitis. Bronchiectasis. Bronchial asthma.</p> <p>The syndrome of the cavity in the lungs. Lung abscess.</p>	4	<p>conversation, presentation, business game, modeling of processes and situations, method "Brainstorming", virtual consultation, standardized patient</p>	<p>Current control: oral examination (individual and frontal); written survey; test control.</p>
5.	Credit	1	discussion,	<p>Final control: test control of theoretical training; control of practical skills; analysis of the results of instrumental research.</p>
6.	<b>TOTAL HOURS</b>	<b>20</b>		

#### 2.2.4. Laboratory classes are not provided

### 2.2.5. Independent work

№ 3/II	Names of the topics	Number of hours	Methods training	Forms control
1.	Inquiry and general inspection of the patients with respiratory organs pathology.	7	videos, video movies, presentation, webinar, sparring partnership (pair training),	Current control: mutual control; self-control; creative tasks; individual tasks; abstracts; report; declamation
2.	General inspection of the patients. Inspection of the chest.	7	illustration, demonstration, videos, video movies, webinar, sparring partnership (pair training),	Current control: mutual control; self-control; creative tasks; individual tasks; abstracts; report; declamation
3.	Palpation of the chest.	7	demonstration, videos, video movies,	Current control: mutual control; self-control; creative tasks; individual tasks; abstracts; report; declamation
4.	Percussion as method of physical examination of the lungs. Comparative percussion of the lungs technique. Topographic	7	videos, video movies, presentation,	Current control: mutual control; self-control;

	percussion of the lungs.			creative tasks; individual tasks; abstracts; report; declamation
5.	Auscultation as method of physical examination of the lungs. Auscultation of the lungs technique. The main respiratory sounds.	7	videos, video movies, presentation,	Current control: mutual control; self-control; creative tasks; individual tasks; abstracts; report; declamation
6.	.Auscultation of the lungs: additional respiratory sounds (rales, crepitation, pleural friction sound).	7	videos, video movies, presentation,	Current control: mutual control; self-control; creative tasks; individual tasks; abstracts; report; declamation
7.	Laboratory sputum and pleural fluid analysis. Instrumental methods of respiratory organs examination  Curation of patients. Intermediate control of knowledge - the final control.	3	videos, video movies, presentation,	Current control: mutual control; self-control; creative tasks; individual tasks; abstracts; report; declamation
8.	The syndrome of the pulmonary tissue		videos, video movies,	Current control:

	consolidation (SPTC)	5	presentation,	mutual control; self-control; creative tasks; individual tasks; abstracts; report; declamation
9.	Syndrome of increased airiness of the lung tissue.	3	videos, video movies, presentation,,	Current control: mutual control; self-control; creative tasks; individual tasks; abstracts; report; declamation
10.	Bronchial obstruction syndrome (broncho-obstructive syndrome).	5	videos, video movies, presentation,,	Current control: mutual control; self-control; creative tasks; individual tasks; abstracts; report; declamation
11.	The syndrome of the cavity in the lungs. Lung abscess.	6	illustration, demonstration videos, videos movies, presentation, webinar, sparring partnership (pair training),	Current control: mutual control; self-control; creative tasks; individual tasks; abstracts; report;

				declamation
12.	Preparation for the credit	6	illustration, demonstration videos, videos movies,	Current control: mutual control; self- control;
	<b>TOTAL</b>	<b>70</b>		

### 3. EVALUATION CRITERIA

**3.1.** Evaluation of the success of education of students is carried out on the basis of the current "Instructions for evaluating the educational activities of students of KhNMU"

**Organization of current control.** Teachers make sure that each student receives the necessary competence in the areas included in the topics of practical classes. Assimilation of the topic (current control) is controlled in a practical lesson in accordance with specific goals. Assessment of current learning activities (CLA) in each practical lesson is carried out on the traditional 4-point scale: "excellent", "good", "satisfactory" and "unsatisfactory".

**Grade from the discipline.** The final lesson (FL) is conducted in accordance with the program of the discipline during the semester according to the schedule, during classes. The grade in the discipline is given to the student at the last (final) lesson. The final score for CLA and final lesson (FL) is defined as the arithmetic mean of traditional grades for each lesson and FL, rounded to 2 decimal places (to the nearest hundredth), which are converted into points in accordance with the "Instructions for assessing student learning. ... »Using Table 2 or the average grade (to the nearest hundredth) for HDPE and its conversion into European Credit Transfer System (ECTC) scores, the teacher automatically receives using the electronic journal ACS. The minimum number of points that a student must score for current activities during the study of the discipline is 120 points, the maximum number of points - 200 points.

**Assessment of students' independent work.** Independent work of students, which is provided by the topic of the lesson along with classroom work, is assessed during the current control of the topic in the relevant lesson.

**Assessment of individual student tasks** is carried out by performing the tasks of the teacher:

- report of the abstract on a practical lesson 0 - 2 points;
- report with a presentation in a practical lesson 0 - 3 points,
- report at scientific and practical conferences of the department, university, writing abstracts, articles 0 - 5 points;
- participation in the All-Ukrainian Olympiad - 5 - 10 points.

Points for individual student tasks (a total of not more than 10 points) can be added as an incentive additional points to the final score for current learning activities, calculated using Table 2 and are part of the assessment of the discipline. During the assessment of mastering each educational topic of the discipline

(current learning activities - CLA) and the final lesson (FL) the student is graded according to the traditional 4-point system: "excellent", "good", "satisfactory" and "unsatisfactory". The maximum number of points that a student can score when studying the discipline is - 200, the minimum - 120 points. After graduating from the discipline "Deontology in medicine " the student receives a test.

**Recalculation of the average score for current activities in a multi-point scale.**

1. Evaluation of current learning activities (CLA). Recalculation of the average grade for current activities in a multi-point scale is carried out in accordance with the "Instructions for assessing the educational activities of students..." (table 2).

2. Assessment of the discipline. The final score for CLA and final lesson (FL) is defined as the arithmetic mean of traditional grades for each lesson and FL, rounded to 2 decimal places, which are listed in points using Table 2.

Assessment of individual tasks of the student is carried out for performance of tasks of the teacher: the report of the abstract on practical employment 0 - 2 points; report with presentation at practical lesson 0 - 3 points, report at scientific and practical conferences of the department, university, writing abstracts, articles 0 - 5 points; participation in the All-Ukrainian Olympiad - for each type of activity 5 - 10 points (not more than 10 points in total), which can be added as an incentive additional points to the final score for current educational activities, calculated using Table 2 and included in the discipline.

Table 2

**Recalculation of the average score for current activities in a multi-point scale (for disciplines ending with a credit)**

4-point scale	200-point scale	4-point scale	200-point scale	4-point scale	200-point scale
5	200	4.22-4,23	169	3.45-3,46	138
4.97-4,99	199	4.19-4,21	168	3.42-3,44	137
4.95-4,96	198	4.17-4,18	167	3.4-3,41	136
4.92-4,94	197	4.14-4,16	166	3.37-3,39	135
4.9-4,91	196	4.12-4,13	165	3.35-3,36	134
4.87-4,89	195	4.09-4,11	164	3.32-3,34	133
4.85-4,86	194	4.07-4,08	163	3.3-3,31	132
4.82-4,84	193	4.04-4,06	162	3.27-3,29	131
4.8-4,81	192	4.02-4,03	161	3.25-3,26	130
4.77-4,79	191	3.99-4,01	160	3.22-3,24	129
4.75-4,76	190	3.97-3,98	159	3.2-3,21	128
4.72-4,74	189	3.94-3,96	158	3.17-3,19	127
4.7-4,71	188	3.92-3,93	157	3.15-3,16	126
4.67-4,69	187	3.89-3,91	156	3.12-3,14	125
4.65-4,66	186	3.87-3,88	155	3.1-3,11	124
4.62-4,64	185	3.84-3,86	154	3.07-3,09	123

4.6-4,61	184	3.82-3,83	153	3.05-3,06	122
4.57-4,59	183	3.79-3,81	152	3.02-3,04	121
4.54-4,56	182	3.77-3,78	151	3-3,01	120
4.52-4,53	181	3.74-3,76	150	<b>less 3</b>	<b>not enough</b>
4.5-4,51	180	3.72-3,73	149		
4.47-4,49	179	3.7-3,71	148		
4.45-4,46	178	3.67-3,69	147		
4.42-4,44	177	3.65-3,66	146		
4.4-4,41	176	3.62-3,64	145		
4.37-4,39	175	3.6-3,61	144		
4.35-4,36	174	3.57-3,59	143		
4.32-4,34	173	3.55-3,56	142		
4.3-4,31	172	3.52-3,54	141		
4,27-4,29	171	3.5-3,51	140		
4.24-4,26	170	3.47-3,49	139		

### 3.2. Test questions:

1. Patient A., 34 years, complaints of dyspnoe with difficult exhalation. Objectively: lungs - weakening of the vocal fremitus. Percussion: box sound. Auscultative: weakening of the vesicular breath. What disease is it possible to think about?

2. Patient B., 23 years, complaints of cough with rusty sputum, dyspnoe, increase temperature. Objectively: on the left subscapular and axillary regions increase of the vocal fremitus. Percussion: dull sound. Auscultative: bronchial breathing. What disease is it possible to think about?

3. Patient V., 46 years, complaints of cough with sputum, dyspnoe. Objectively: the vocal fremitus is conducted with identical on symmetric areas. Percussion: pulmonary sound. Auscultative: all of lung surface on a background the harsh breathing the diffuse whistling and buzzing wheezes. What disease is it possible to think about?

4. Patient M., 50 years, complaints about the mixed dyspnoe, asphyxia. Objectively: expressed diffuse cyanosis, 40 in a minute amount of breath, asymmetry of thorax, lag in the act of breathing of right half, the vocal fremitus is acute weaken on the right. Percussion: dulled tympany. Auscultative: sharp weakening of the vesicular breathing above the right half of thorax. What disease is it possible to think about?

5. Patient, 70 years, complaints about absence of appetite, dry cough, hemoptysis, dyspnoe, pain in thorax at breathing. Objectively: hyposthenic, skin-pale-color, expressed dyspnoe with amount of breath = 30 in a minute, lag in the act of breathing of the left half of thorax, the vocal fremitus is weaken. Percussion: dull sound. Auscultative: weakening of the vesicular breathing, in a lower region, breathing absent on the left. What disease is it possible to think about?

### 3.3. Control questions

1. Patient A., 34 year, complaints about the dyspnea with the difficult exhalation. Objectively: lungs - weaken vocal fremitus. Percussion: box sound.

Auscultative: weaken of the vesicular breathing. What syndrome is it possible to think about?

2. Patient, 23 years, complaints of cough with rusty sputum, dyspnoe, increase of temperature. Objectively: left subscapular and axillary regions - strengthening of the vocal fremitus. Percussion: dull sound. Auscultative: bronchial breath. What syndrome is it possible to think about?

3. How do the physical properties of the lung tissue at dull sound?

4. There is bandbox sound along the anterior surface of the chest. What diagnosis can be supposed?

5. There is tympanic sound from the 2nd rib to the lower border of the lungs on the right side of the chest. What diagnosis can be supposed?

6. There is tympanic sound from the 7th to the 9th interspace in the left axillary area, the sound is dull under this area. What diagnosis can be supposed?

7. The left half of the chest delays in the act of respiration. The voice resonance is weak. The percussion sound is tympanic. What diagnosis can be supposed?

8. The left half of the chest delays in the act of respiration. There is increased voice resonance and dull sound along the paraspinal, scapular, postero-, mid-, and anteroaxillary lines downward the 5th interspace. What diagnosis can be supposed?

9. There is delay of the right hemithorax in the act of respiration, the voice resonance is increased. The percussion sound is tympanic. What diagnosis can be supposed?

10. The right half of the chest delays in the act of respiration. The voice resonance is increased. The percussion sound is dull. What diagnosis can be supposed?

**3.4. Individual tasks include:** review of scientific literature, preparation of abstracts, conducting research and individual teaching and research tasks, writing abstracts of research and presentations at conferences.

**3.6. The rules for appealing the assessment** are carried out in accordance with applicable regulations.

#### **4. POLICY OF DISCIPLINE**

In order to successfully complete the relevant course, it is necessary to regularly attend practical classes; to have theoretical preparation for practical classes according to the subject; not to be late and not to miss classes; perform all necessary tasks and work in each lesson; be able to work with a partner or in a group; contact the curators of the course on various issues on the subject of classes and receive it when you need it.

Students can discuss different tasks, but their performance is strictly individual. It is not allowed to write off, use various software, tips, use a mobile phone, tablet or other electronic gadgets during classes for purposes other than the educational process. Students are not allowed to attend practical classes.

Curation of patients is possible provided that students have the appropriate form of clothing, a health book with a mark on vaccination against diphtheria, the results of the examination for the stress of immunity to measles (or a mark on vaccination).



Students with special needs can meet with the teacher or warn him before the start of classes, at the request of the student it can be done by the head of the group. If you have any questions, please contact the teacher.

Students' participation in research and conferences on this topic is encouraged.

## **5. ACADEMIC FAIRNESS**

The Department of Propaedeutics of Internal Medicine №1, Fundamentals of Bioethics and Biosafety maintains zero tolerance for plagiarism. Students are expected to constantly raise their awareness of academic writing. The first classes will provide information on what to consider plagiarism and how to properly conduct research and scientific research.

## **6. RECOMMENDED BOOKS**

### **Basic:**

1. O.M. Koval'ova., N.A.Safargalina-Kornilova. Propedevtyka vnutrishn'oi' medycyny. Pidruchnyk z gryfom MON, MOZ.– K.: VSV «Medycyna».. – 2012. 720 s (in Ukrainian).

2. O.N. Kovaleva., N.A.Safargalina-Kornilova. Propedevtika vnutrennej medicyny. Uchebnik s grifom MON, MZ .– K.: VSI «Medicina». – 2013. 752 s (in Russian).

3. O.N.Kovaleva, N.A.Safargalina-Kornilova, T.N.Ambrosova. Laboratornye i instrumental'nye metody issledovaniya bol'nyh s patologiej organov dyhaniya: Metodicheskie ukazaniya dlja studentov medicinskih vuzov i prakticheskikh vrachej.-Har'kov: «Antikva», 2004.-55S (in Russian).

4. Kovaleva O.N., Safargalina-Kornilova N.A., Gerasimchuk N.N. Laboratornoe issledovanie mokroty u bol'nyh s patologiej bronholegochnoj sistemy. Uchebnoe posobie.– Har'kov: HNMU, 2013. 84 s (in Russian).

5. Dzjak G.V., Netjazhenko V.Z., Homazjuk T.A. ta in. Osnovy obstezhennja hvorogo ta shema istorii' hvoroby (dovidnyk). – Dn-sk, Art-pres, 2002 (in Russian).

6. Je.A.Kucherenko, T.Je.Zhurova, E.V.Sirenko «Laboratornaja diagnostika vospalitel'nyh i destruktivnyh zbolevanij legkih». Uchebnoe posobie dlja samostojatel'noj raboty vrachej-laborantov, internov, laborantov s vysshim obrazovaniem. – Har'kov: HMAPO, 2008. 59s (in Russian).

### **Auxiliary:**

1. Praktykum z propedevtyky vnutrishn'oi' medycyny. Chastyna 1. «Osnovni metody obstezhennja hvoryh u klinici vnutrishnih hvorob» T.V.Ashheulova, T.M.Ambrosova, V.I.Smirnova, N.M.Gerasymchuk, I.V.Sytina - Harkiv, HNMU, 2018. - 58 s (in Ukrainian).

2. Praktykum z propedevtyky vnutrishn'oi' medycyny. Chastyna 2. «Symptomy ta syndromy zahvorjuvan' vnutrishnih organiv». T.V.Ashheulova, G.V.Demydenko, N.M.Gerasymchuk, O.A.Kochubej, G.V.Kozhem'jaka, V.A.Nikolajeva. - Harkiv, HNMU, 2018. - 57s(in Ukrainian).

3. «Shema istorii' hvoroby» v kursi propedevtyky vnutrishn'oi' medycyny. Metodychni vkazivky dlja studentiv III kursu – medychnyh fakul'tetiv.

T.V.Ashheulova, N.M.Gerasymchuk .- Harkiv: HNMU, 2019 – 14s (in Ukrainian).

### **Information resources**

1.[http://www.knmu.kharkov.ua/index.php?option=com\\_content&view=frontpage&Itemid=1&lang=uk](http://www.knmu.kharkov.ua/index.php?option=com_content&view=frontpage&Itemid=1&lang=uk)

2.<http://repo.knmu.edu.ua/>

3.[http://knmu.kharkov.ua/index.php?option=com\\_content&view=article&id=498&Itemid=42&lang=uk](http://knmu.kharkov.ua/index.php?option=com_content&view=article&id=498&Itemid=42&lang=uk)

4.<http://www.moz.gov.ua/ua/portal/>

5.<http://www.mon.gov.ua/>

### **8. OTHER**

Useful links:

Provisions on the Prevention, Prevention and Management of Cases of Sexual Harassment and Discrimination at Kharkiv National Medical University  
[http://files.knmu.edu.ua:8181/upload/redakt/doc\\_uchproc/polog-sex.doc](http://files.knmu.edu.ua:8181/upload/redakt/doc_uchproc/polog-sex.doc)

Regulations on Academic Integrity and Ethics of Academic Relations at Kharkiv National Medical University

[http://files.knmu.edu.ua:8181/upload/redakt/doc\\_uchproc/polog\\_ad\\_etyka\\_text.pdf](http://files.knmu.edu.ua:8181/upload/redakt/doc_uchproc/polog_ad_etyka_text.pdf)

The order of conducting classes on in-depth study by students of Kharkiv National Medical University of certain disciplines beyond the scope of the curriculum

[http://files.knmu.edu.ua:8181/upload/redakt/doc\\_uchproc/nak-poriad-pogl-vyv-dyvc.docx](http://files.knmu.edu.ua:8181/upload/redakt/doc_uchproc/nak-poriad-pogl-vyv-dyvc.docx)

Regulations on the Commission on Academic Integrity, Ethics and Conflict Management

[http://files.knmu.edu.ua:8181/upload/redakt/doc\\_uchproc/polog\\_komis\\_ad\\_text.pdf](http://files.knmu.edu.ua:8181/upload/redakt/doc_uchproc/polog_komis_ad_text.pdf)

Regulations on the recognition of the results of non-formal education at Kharkiv National Medical University

[http://files.knmu.edu.ua:8181/upload/redakt/doc\\_uchproc/polog\\_neform\\_osv.pdf](http://files.knmu.edu.ua:8181/upload/redakt/doc_uchproc/polog_neform_osv.pdf)

INCLUSIVE

EDUCATION:[http://www.knmu.kharkov.ua/index.php?option=com\\_content&view=article&id=7108%3A2021-03-10-14-08-02&catid=12%3A2011-05-10-07-16-32&Itemid=33&lang=uk](http://www.knmu.kharkov.ua/index.php?option=com_content&view=article&id=7108%3A2021-03-10-14-08-02&catid=12%3A2011-05-10-07-16-32&Itemid=33&lang=uk)

ACADEMIC

INTEGRITY:[http://www.knmu.kharkov.ua/index.php?option=com\\_content&view=article&id=2520%3A2015-04-30-08-10-46&catid=20%3A2011-05-17-09-30-17&Itemid=40&lang=uk](http://www.knmu.kharkov.ua/index.php?option=com_content&view=article&id=2520%3A2015-04-30-08-10-46&catid=20%3A2011-05-17-09-30-17&Itemid=40&lang=uk)

[http://files.knmu.edu.ua:8181/upload/redakt/doc\\_uchproc/kodex\\_AD.docx](http://files.knmu.edu.ua:8181/upload/redakt/doc_uchproc/kodex_AD.docx)