

# ABSTRACT

## OF THE ACADEMIC DISCIPLINE

### «INSTRUMENTAL METHODS OF RESEARCH IN PULMONOLOGY. EVALUATION OF THE FUNCTION OF EXTERNAL BREATHING »

#### DISCIPLINE INFORMATION

Syllabus of the discipline "Instrumental research methods in pulmonology. Assessment of the function of external respiration "(elective course) is made for the educational-professional program " Medicine "of the second (master's) level of higher education.

The course program determines the prerequisites for access to education, orientation and main focus of the program, the amount of ECTS credits required for a master's degree, a list of general and special (professional) competencies, normative and variable content of training, formulated in terms of learning outcomes and control requirements quality of higher education.

The department accepts qualified students of any race, national or ethnic origin, sex, age, people with special needs, any religion, sexual orientation, gender, veteran status or marital status for all rights, privileges, programs and activities, provided to university students.

#### DESCRIPTION OF THE DISCIPLINE

"Instrumental research methods in pulmonology. Assessment of the function of external respiration "is a selective discipline of the clinical stage of undergraduate training, the study of which allows students to master the general principles of using diagnostic methods such as spirometry, peak flowmetry and the basics of their use for diagnosing lung diseases. Thus, the Fundamentals of instrumental research methods in pulmonology. Assessment of external respiration is an educational clinical discipline that studies the physical foundations of ultrasound in medicine, ultrasound anatomy of the heart and blood vessels, methods and techniques of ultrasound examination of the cardiovascular system, characteristic ultrasound manifestations of certain diseases of the cardiovascular system.

The organization of the educational process is carried out according to the requirements of the European credit transfer system of the educational process, which is based on determining the educational load of the higher education student required to achieve certain learning outcomes and is accounted for in ECTS credits. The amount of one loan is 30 hours. The workload of one academic year is usually 60 ECTS credits.

To study the discipline "Instrumental research methods in pulmonology. Assessment of the function of external respiration "is given 90 hours - 3.0 ECTS credits.

*The subject of the discipline* "Instrumental research methods in pulmonology. Assessment of the function of external respiration "covers the study of concepts, principles, research methods, methodological approaches to instrumental research in pulmonology, as well as spirometric semiotics of the most common diseases of the pulmonary system. In the course of studying the discipline the practical application and significance of diagnostic methods with evaluation of research results are given and demonstrated.

#### INTERDISCIPLINARY CONNECTIONS

According to the curriculum, study of the discipline "Instrumental research methods in pulmonology. Assessment of the function of external respiration "is carried out in \_\_\_\_\_ semesters, after the student has mastered knowledge of certain sections of biological physics, bioorganic and biological chemistry, human anatomy, pathomorphology, physiology and pathophysiology and integrates with these disciplines. In turn, the discipline "Instrumental research methods in pulmonology. Assessment of external respiration "contributes to a deeper



understanding of the basics of instrumental diagnosis of diseases of the pulmonary system in the study of the following clinical disciplines - internal medicine, family medicine, oncology, anesthesiology and intensive care, providing integration with these disciplines and the ability to apply ultrasound further training and professional activities.

### **THE PURPOSE AND OBJECTIVES OF THE DISCIPLINE**

1.1. The purpose of teaching the discipline "Instrumental research methods in pulmonology. Assessment of the function of the external respiratory system "is the formation of the student's basics of clinical thinking and the acquisition of professional competencies in the examination of a patient with pulmonary pathology. To provide knowledge and ability to correctly interpret the results of instrumental studies of the lungs in various diseases of the pulmonary system.

1.2. The main tasks of studying the discipline "Instrumental research methods in pulmonology.

### **ASSESSMENT OF THE FUNCTION OF EXTERNAL RESPIRATION "IS:**

- Mastering by the student the theoretical knowledge necessary for performance of instrumental methods of diagnostics in pulmonology
- Mastering the practical techniques and methods of instrumental examination of patients
- Mastering the semiotics of instrumental research of common diseases of the human pulmonary system

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