Speciality "General Medicine"

ACADEMIC DISCIPLINE "PATHOLOGICAL PHYSIOLOGY"
BIOMEDICAL MODULE 2

Academic discipline outline	General theory of disease. Concepts and categories of pathology. Classification and nomenclature of diseases. Social aspects of disease development. Characteristics of the main properties of pathogenic factors. Role of specific causes and conditions in disease development. General pathogenesis. Mechanisms of body resistance to pathogenic factors. General patterns and mechanisms of disease development. Processes of recovery (sanogenesis) and dying (thanatogenesis). Typical pathological processes. General patterns of occurrence and development mechanisms of inflammation, tumor growth, fever, hypoxia, typical metabolic disorders, starvation, and neurogenic dystrophies. Principles of correction of structural and functional disorders in typical pathological processes. General patterns of disorders in various organs and systems. Mechanisms of compensation for impaired functions and structures, principles of disorder correction.
Resulting skills	Advanced professional skills. To use knowledge about aetiology and pathogenesis of general pathological processes, typical forms of human organ and system pathology in pathophysiological analysis of laboratory assessments
Learning outcomes	A student must: **know:** basic terms of general nosology; causes, underlying mechanisms of development and outcomes of typical pathological processes; fundamental patterns and mechanisms of disease development and recovery of humans; compensation mechanisms and principles of correction of structural and functional disorders in typical forms of pathology of organs and body systems; role of experimental research in the study of pathological processes: opportunities and limitations, prospects, and requirements for the experiment and the experimenter; **be able to:** identify and evaluate pathological and compensatory-adaptive reactions, and body's functional reserves in various forms of organ and system pathologies; conduct a pathogenetic analysis of a complete blood count in patients with various types of pathology; provide a conclusion on a complete blood count for blood system pathologies and assess the degree of observed changes; identify and evaluate typical acid-base disorders, their mechanisms, and the degree of compensation;

	identify main types of cardiac arrhythmias, liver and kidney dysfunctions based on clinical and additional diagnostics methods; apply acquired knowledge of pathophysiology in the study of clinical disciplines and in subsequent medical practice; **master:** techniques for pathophysiological analysis of clinical, laboratory, and experimental data to derive conclusions on possible causes and mechanisms of pathology development; skills in pathophysiological analysis of clinical symptoms and syndromes; methods for substantiating and applying etiological and pathogenetic principles in disease prevention and treatment; skills in independent study of educational, reference, teaching, and scientific literature, skills in systemic approach to medical information analysis.
Semester(s)	5,6 semesters
Prerequisite	Normal anatomy. Pathological anatomy. Normal physiology. Histology, cytology, embryology. Biological chemistry. Medical and biological physics. Microbiology and immunology.
Credit value	6 credits
Academic hours	228 academic hours, of which: 116 class hours
Forms of midterm attestation	Test Examination