

**The planned schedule of practical unit by Pathological physiology
on 6 semester 2025 – 2026 of academic year for Medical faculty**

№	Name of the practical lesson	Watch	List of study questions
1. 02.02.2026 – 06.02.2026	Typical disorders of external and internal respiration. Hypoxia. Respiratory failure.	2	1. Hypoxia. Definitions of the concept. Classification of hypoxia by origin (Petrov I.R.), by pathogenesis (A.D. Ado). Etiology, pathogenesis of individual types of hypoxia, consequences. 2. The concept of respiratory failure (RF). Types of RF by etiology and pathogenesis. 3. Obstructive, restrictive and mixed types of pulmonary ventilation disorders. Criteria. 4. Diffusion, ventilation- perfusion and centrogenic forms of respiratory failure. Causes, mechanisms, manifestations, criteria.
		1	1. Pathological forms of breathing. 2. Provide a definition of the term "Respiratory distress syndrome". Causes, mechanisms of development. Principles of therapy.
2. 09.02.2026 – 13.02.2026	Typical renal dysfunctions.	2	1. Nephrotic syndrome. Etiology, pathogenesis. 2. Nephritic syndrome. Etiology, pathogenesis.
		1	1. Etiology, pathogenesis of immune nephropathy. 2. Renal and extrarenal symptoms and syndromes in nephropathy.
3. 16.02.2026 – 20.02.2026	Typical disorders of the blood system. Acute and chronic blood loss. Acute and chronic posthemorrhagic anemia.	2	1. Definitions of the concept "anemia". Methods of studying anemia. Principles of classification of anemia. 2. Acute blood loss. Etiology, pathogenesis, stages of compensation. 3. Pathogenesis of acute posthemorrhagic anemia depending on the stage of compensation in acute blood loss. Blood picture by stages.
		1	1. Chronic blood loss. Etiology, pathogenesis. 2. Chronic posthemorrhagic anemia as a symptom of chronic blood loss. Blood picture with it.
4. 23.02.2026 – 27.02.2026	Typical disorders of the blood system. Leukocytosis, leukopenia.	2	1. Leukocytosis. Definitions of the concept. 2. Types of leukocytosis by etiology and pathogenesis. 3. Absolute and relative leukocytosis. Types of absolute leukocytes, their clinical significance. 4. Leukopenia definition of the concept.
		1	1. Types of leukopenia by etiology and pathogenesis. 2. Absolute leukopenia, its types, clinical significance. Agranulocytosis as a special type of absolute leukopenia
5. 02.03.2026 – 06.03.2026	Typical disorders of the blood system. Hemoblastoses. Leukemias	2	1. Definitions of the term "leukemia". 2. Classification of leukemias by morphogenetic principle, by course, by the number of leukocytes in the peripheral blood.
		1	1. The main differences in the blood picture in acute and chronic leukemia. 2. Leukemia and leukemoid reactions. 3. Methods for studying leukemia.
6. 09.03.2026 – 13.03.2026	Typical disorders of the hemostasis system. Violation of vascular-platelet hemostasis.	2	1. Etiopathogenetic classification of hemostasis disorders. 2. Causes, mechanism and consequences of vascular-platelet hemostasis disorders. 3. Thrombocytopenic purpura: pathogenesis of thrombocytopenia, hemorrhagic syndrome, laboratory and clinical (types of bleeding) diagnostic data, pathogenetic therapy.
		1	1. Thrombasthenia Glanzman: pathogenesis of hemorrhagic syndrome, laboratory diagnostics, type of bleeding. 2. Hemorrhagic vasculitis: etiology, pathogenesis, laboratory and clinical diagnostic data, principles of pathogenetic therapy.
7. 16.03.2026 – 20.03.2026	Typical disorders of the hemostasis system. Coagulation hemostasis disorder. DIC syndrome.	2	1. Stages of fibrin clot formation. Internal and external coagulation pathways. Pathogenetic factors of thrombus formation. Features of thrombus formation in arterial and venous vessels. 2. Causes, mechanism and consequences of coagulation hemostasis disorders. Von Willebrand disease : pathogenesis of hemorrhagic syndrome, data from laboratory and clinical (types of bleeding) studies, pathogenetic therapy. 4. Hemophilia: pathogenesis of hemorrhagic syndrome, laboratory and clinical diagnostics, pathogenetic therapy.
		1	1. DIC syndrome. Definition. Etiology. Pathogenesis. Main clinical and laboratory manifestations by stages. Principles of therapy. 2. Causes and consequences of dysfunction of the anticoagulant system: anticoagulants (primary and secondary) and the plasminogen system .
8.	Colloquium №3.	2	1. Colloquium №3.

23.03.2026 – 27.03.2026		1	1. Generalization and control of the level of mastery of the educational material on the issues of the 3rd section “Typical dysfunctions of organs and systems”.
9. 30.03.2026 – 03.04.2026	Typical disorders of the cardiovascular system. Heart failure	2	1. Definitions of the concept "heart failure". 2. Types by etiology, by course, by phases and parts of the heart. 3. Etiology and pathogenesis of acute and chronic heart failure.
		1	1. Definition of the term "coronary insufficiency". Etiology, pathogenesis, complications and outcomes. 2. Myocardial infarction, causes, development mechanisms, complications. ECG signs of myocardial infarction.
10. 06.04.2026 – 10.04.2026	Typical disorders of the cardiovascular system. Systemic disorders of arterial blood pressure.	2	1. Arterial hypertension, definition of the concept. Types. Primary and secondary arterial hypertension. 2. Hypertension. Etiology, pathogenesis, modern concepts of the origin and development of hypertension.
		1	1. Arterial hypotension, definitions of the concept. Types. Primary and secondary arterial hypotension. 2. Hypotonic disease. Etiology, pathogenesis.
11. 13.04.2026 – 17.04.2026	Typical disorders of the cardiovascular system. Cardiac arrhythmias.	2	1. Cardiac arrhythmias, definition of the concept. Their types by etiology and pathogenesis. Classifications.
		1	1. Etiology, pathogenesis, ECG signs of certain types of cardiac arrhythmias.
12. 20.04.2026 – 24.04.2026	Typical digestive disorders. Disorders of parietal and cavity digestion.	2	1. Consequences of removal of various parts of the gastrointestinal tract. Dumping syndrome. Etiology, pathogenesis, manifestations 2. Disorders of the secretory and motor function of the stomach. Etiology, pathogenesis. 3. Peptic ulcer of the stomach and duodenum. Etiology, pathogenesis, modern concept of origin and development.
		1	1. Violation of cavity and parietal digestion in the intestine. Etiology, pathogenesis, consequences. Malabsorption syndrome . Celiac disease.
13. 27.04.2026 – 01.05.2026	Typical liver dysfunctions. Jaundice.	2	1. Liver failure definition of the concept. Classification by pathogenesis. 2. Manifestations and consequences of liver failure. Hepatic coma. 3. Jaundice, definitions of the concept. Classification by pathogenesis.
		1	1. Etiology, pathogenesis of individual types of jaundice. Differential diagnostics of them.
14. 04.05.2026 – 08.05.2026	Typical disorders of the endocrine system.	2	1. Causes and main structures of damage in the pathogenesis of endocrine disorders. The role of feedback mechanism disorders in the development of endocrine diseases. 2. Etiology, pathogenesis of individual syndromes in diseases of the endocrine system. Hypo- and hyperfunctional disorders of the adrenal cortex, pituitary gland and thyroid gland.
		1	1. General etiology and characteristics of damage to the nervous system (the role of the blood-brain barrier, trace reactions of the second signaling system, etc.).
15. 11.05.2026 – 15.05.2026	Typical disorders of the nervous system.	2	1. The main typical pathological processes in the nervous system. Generator of pathologically increased excitation, inhibition deficit, denervation syndrome, syndrome of nervous dystrophies, pathological system, spinal shock).
		1	1. Pain syndrome. The concept of nociceptive and antinociceptive systems. Types of pain. Principles of therapy.
16. 18.05.2026 – 22.05.2026	Colloquium №4.	2	Colloquium №4.
		1	1. Generalization and control of the level of mastery of educational material on the issues of the section “Typical dysfunctions of organs and systems”.
17. 25.05.2026 – 29.05.2026	Final testing in sections of pathological physiology	2	Generalization and control of the level of acquisition of knowledge and skills in three sections of the discipline.

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