#### **ANNOTATION**

# work program of the academic discipline "Pathological anatomy, clinical pathological anatomy"

Speciality	05/31/01 General medicine
Number of credits	In accordance with the RUP
Interim certification form (test/exam)	3test/exam

The work program of the academic discipline "Pathological anatomy, clinical pathological anatomy" is compiled in accordance with the requirements of the Federal State Educational Standard of Higher Education 31.05.01 General Medicine.

### 1. The purpose of studying the discipline

Target mastering the academic discipline "Pathological anatomy, clinical pathological anatomy"students' study of the structural foundations of diseases, their etiology and pathogenesis, which is necessary for mastering clinical disciplines and in the work of a doctor.

# 2. Requirements for the results of mastering the discipline

The study of the discipline "Pathological anatomy, clinical pathological anatomy" is aimed at developing the following competencies in accordance with the Federal State Educational Standard for Higher Education in the field of training 05/31/01 General Medicine:

general professional (GPC): GPC 9 -the ability to assess morphofunctional, physiological conditions and pathological processes in the human body to solve professional problems;

b) professional (PC): PC 5 -readiness to collect and analyze the patient's complaints, his medical history, examination results, laboratory, instrumental, pathological, anatomical and other studies in order to recognize the condition or establish the presence or absence of the disease;

### 3. Summary of the discipline

## Section 1: "General pathological anatomy"

Contents and algorithm for studying the subject "pathological anatomy". Ethical and deontological norms in pathological anatomy. The main stages in the history of the development of pathological anatomy. Objectives, objects and methods of pathological studies. Rostov School of Pathologists.

Pathology of accumulation (dystrophy). Disturbances of protein, lipid, carbohydrate metabolism. Mucoid and fibrinoid swelling. Hyaline changes. Amyloidosis. Disorders of the metabolism of chromoproteins, nucleic acids, minerals. Pathological calcification. Stone formation.

Necrosis. Apoptosis.

Impaired blood supply (plethora, anemia). Bleeding, hemorrhage, plasmorrhagia. Disorders of lymph circulation and tissue fluid content. Stasis. Sludge syndrome. Thrombosis. Shock. DIC syndrome. Embolism. Ischemia.

Inflammation, general characteristics. Acute, exudative inflammation. Productive and chronic inflammation. Granulomatous inflammation. Granulomatous diseases. Specific granulomas (tuberculosis, syphilis, leprosy, rhinoscleroma).

Immunopathological processes. Classification and morphology of hypersensitivity reactions. Autoimmunization and autoimmune diseases. Immune deficiency syndromes (primary and secondary).

Repair. Wound healing. Hyperplasia. Hypertrophy. Atrophy. Metaplasia. Dysplasia. Intraepithelial neoplasia.

Introduction to oncomorphology. Molecular basis of carcinogenesis. Basic properties of tumors. Nomenclature and principles of classification. Metastasis. The impact of a tumor on the body. Tumors from tissues derived from mesenchyme, neuroectoderm and melanin-producing tissue. Epithelial tumors. Clinical and morphological characteristics.

Pathology associated with environmental factors. Pneumoconiosis. Alcoholism and drug addiction.

Section 2: "Private pathological anatomy"

Tumors of hematopoietic and lymphoid tissues. Anemia. Polycythemia. Thrombocytopathies. Atherosclerosis. Hypertensive disease (essential hypertension).

Secondaryarterial hypertension. Complications of

atherosclerosis and hypertension.

Heart diseases. Cardiac ischemia. Cardiomyopathies.

Congenital heart and vascular defects. Vasculitis. Rheumatism. Systemic lupus erythematosus, rheumatoid arthritis. Acquired heart defects. Pathology of the pericardium.

Bacterial and viral airborne infections. Flu. Parainfluenza. Respiratory syncytial and adenoviral infections. Bacterial, mycotic and protozoal pneumonia.

Chronic obstructive pulmonary diseases:chronic obstructive bronchitis, bronchiectasis, pulmonary emphysema. Bronchial asthma. Interstitial diseases: pneumoconiosis, fibrosing alveolitis.

Diseases of the esophagus, stomach. Esophagitis. Gastritis. Peptic ulcer (peptic ulcer). Tumors. Intestinal diseases. Infectious enterocolitis (dysentery, typhoid fever, cholera). Ischemi-

chelic colitis. Nonspecific ulcerative colitis. Crohn's disease. Appendicitis. Intestinal tumors.

Diseases of the liver and biliary system. Acute and chronic hepatitis. Liver cirrhosis.

Liver tumors. Cholelithiasis. Pancreatic diseases.

Kidney diseases. Glomerulonephritis. Nephrotic syndrome. Pyelonephritis. Urolithiasis. Acute and chronic renal failure. Kidney tumors.

Diseases of the endocrine glands. Diabetes. Diseases of the thyroid gland (thyroiditis, goiter). Tumors of the endocrine glands.

Inflammatory and dyshormonal diseases of male and female genital organs. Precancerous processes and cancers of the cervix, endometrium, ovaries, testicles, mammary and prostate glands. Pathology of pregnancy.

Tuberculosis. Syphilis. AIDS. Sepsis. Septic endocarditis. Diphtheria.

Scarlet fever. Meningococcal infection.

Section 3: "Clinical pathological anatomy"

Structure, role and tasks of the pathological service. Diagnosis in medicine, its types and functions. The concept of a nosological unit. International Statistical Classification of Diseases and Related Health Problems (ICD 10 Revision). Principles of forming a pathological diagnosis. Iatrogenesis, the content of the concept, their classification.

General principles of intravital pathomorphological diagnosis. Various types of biopsies. Rules for collection and delivery of biopsy material to the pathology department. Possibilities of microscopic examination of biopsy material in diagnosis and study of the dynamics of the development of the pathological process. The importance of electron microscopy in the diagnosis of diseases. The use of molecular biological research methods in the practical activities of pathology departments. The use of IHC in diagnostics and methods for predicting the course of diseases.

General principles of post-mortem pathological diagnosis, the importance of autopsy. Principles and implications of microbiological examination of autopsy material. Medical death certificate, principles and examples of filling it out. Rules for comparing (comparing) the final clinical and pathological diagnoses. Clinical expert commissions and clinical anatomical conferences.