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 Chief of the department of
 Histology, Cytology, Embryology and
 Pathological Morphology with a Course
 Forensic Medicine
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Thematic plan of practical classes in Pathomorphology for applicants of high education of the 2nd - 3rd years (IV- V semesters) of the Faculty of Dentistry for the 2023-2024 academic year.

No	Topic	Number of hours	Group
1.	Topic 1. Practical lesson 1. Introduction to pathomorphology . The subject and tasks of pathomorphology . Pathological diagnostic methods. The main stages of the development of pathomorphology . Morphological changes of cells as a response to stressful and toxic damage (parenchymatous/cellular dystrophies) Cellular dystrophies: hyaline -droplet , hydropic , fatty.	2.0	1
2.	Topic 2. Practical lesson 2. Morphological changes of the extracellular matrix (stroma) as a response to damage (stromal -vascular dystrophies). Pathomorphology of accumulation of complex proteins (hyalinosis), fats and carbohydrates. Exhaustion of the body.	2.0	1
3.	Topic 3. Practical lesson 3. Pathomorphology of accumulation of products of disturbed metabolism. Disorders of iron metabolism and metabolism of hemoglobinogenic pigments, pathomorphological manifestations of melanin formation disorders, nucleoprotein and copper metabolism. Calcification of tissues. Formation of stones.	2.0	1
4.	Topic 4. Practical lesson 4. Necrosis - definition, terms and phases of development, consequences. Clinical and morphological forms of necrosis. Pathological anatomy of multiple organ failure. Fundamentals of Thanatology. Death, mechanisms, signs. Biological, medical, social aspects due to a chronic incurable disease. The concept of thanatogenesis . Structural mechanisms of cessation of activity of vital organs during the natural course of the disease. Complications of stopping the work of the heart, lungs, brain, kidneys, liver.	2.0	1
5.	Topic 5. Practical lesson 5.	2.0	1

	Practical skills according to the section: Disorders of blood and lymph circulation. Inflammation.		
6.	Topic 6. Practical lesson 6. Acute systemic circulatory disorders (acute coronary insufficiency, shock) and systemic circulatory disorders in chronic heart failure and their consequences. Regional blood circulation disorders (hyperemia, ischemia, plasmorrhagia , bleeding and hemorrhage). Violation of lymph formation and circulation.	2.0 _	1
7.	Topic 7. Practical lesson 7. Violations of hemostasis: hemorrhagic syndrome, thrombosis, DIC-syndrome. Embolism. Thromboembolism of the pulmonary artery, thanatogenesis .	2.0	1
8.	Topic 8. Practical lesson 8. Inflammation : causes, morphogenesis. Pathomorphology exudative inflammation	2.0	1
9.	Topic 9. Practical lesson 9. Proliferative (productive) inflammation: with the formation of acute condylomas, around parasitic animals, intermediate productive inflammation, granulomatous inflammation. Specific proliferative inflammation.	2.0	1
10.	Topic 10. Practical lesson 10. Practical skills according to the section: Disorders of blood and lymph circulation. Inflammation.	2.0	1
11.	Topic 11. Practical lesson 11. Molecular and pathomorphological bases of the immune response. The immune system in the prenatal and postnatal period. Pathology of immune processes: amyloidosis, hypersensitivity reactions , transplant rejection reaction. Immune deficiency. Autoimmune diseases.	2.0	1
12.	Topic 12. Practical lesson 12. Regeneration. Structural basis of physiological adaptation of organs and cells. Morphology of cell accommodation processes. Compensatory and adaptive processes.	2.0 _	1
13.	Topic 13. Practical class 13-14. Oncogenesis . Anatomical and microscopic features and types of growth of benign and malignant tumors. Morphological characteristics of the main stages of development of malignant tumors. Clinical and morphological nomenclature of tumors. Epithelial tumors: benign organ-nonspecific epithelial tumors, cancer (features of development, metastasis, histological forms).	4.0	1
14.	Topic 14. Practical lesson 15. Benign and malignant non-epithelial (mesenchymal) tumors. Sarcoma: features of development and metastasis. Tumors of fibroblastic , myofibroblastic and fibrohistiocytic origin. Tumors from adipose and muscle tissue, tumors from blood vessels.	2.0 _	1
15.	Topic 15. Practical lesson 16. Nomenclature and morphological features of tumors originating from melanin-producing tissue.	2.0	1

16	Topic 16. Practical lesson 17. Nomenclature and morphological features of tumors of the nervous system.	2.0 _	1
17 .	Topic 17. Practical lesson 18. Anemia. Thrombocytopathies .	2.0	1
18 .	Topic 18. Practical lesson 19. Tumors of hematopoietic and lymphoproliferative tissue.	2.0	1
19 .	Topic 19. Practical lesson 20. Practical skills for section: Immunopathological processes. Regeneration, processes of adaptation and compensation. Tumors	2.0	1
20 .	Topic 20. Practical lesson 21. Atherosclerosis and arteriosclerosis. Coronary heart disease.	2.0	1
21 .	Topic 21. Practical lesson 22. Hypertension and arteriosclerosis . Hypertensive disease and symptomatic arterial hypertension.	2.0	1
22 .	Topic 22. Practical lesson 23. Cerebrovascular disease. Alzheimer's disease. Multiple sclerosis. Amyotrophic lateral sclerosis. Postresuscitation encephalopathy. Diseases of the peripheral nervous system.	2.0	1
23 .	Topic 23. Practical lesson 24. Systemic connective tissue diseases with autoimmunization : rheumatism, systemic lupus erythematosus, rheumatoid arthritis, systemic scleroderma, dermatomyositis, Bekhterev's disease. Diseases of the endocardium and myocardium: cardiomyopathy, endocarditis, myocarditis, acquired heart defects.	2.0	1
24 .	Topic 24. Practical lesson 25. Practical skills for section: Diseases of the blood system and cardiovascular system.	2.0	1
25 .	Topic 25. Practical lesson 26. Respiratory diseases.	2.0	1
26 .	Topic 26. Practical lesson 27. Diseases of esophagus, stomach and intestines.	2.0	1
27 .	Topic 27. Practical lesson 28. Diseases of the liver, biliary system and pancreas.	2.0	1
28 .	Topic 28. Practical lesson 29. Kidney diseases.	2.0	1
29 .	Topic 29. Practical lesson 30. Hypothalamic-pituitary disorders. Adrenal gland pathology. Pathology of the thyroid gland. Pathology of the endocrine apparatus of the pancreas.	2.0	1

30.	Topic 30. Practical lesson 31. Manifestations of diseases related to nutrition. Vitamins . Occupational diseases.	2.0	1
31.	Topic 31. Practical lesson 32. Pathology of the female and male reproductive system. Breast disease.	2.0	1
3 2.	Topic 32. Practical lesson 33. Practical skills for section: Diseases of respiratory organs. Diseases of digestive organs. Diseases of the genitourinary system. Diseases of the endocrine system. Diseases of the musculoskeletal system. Diseases of pregnancy and the postpartum period. Diseases of the pre- and perinatal period. Pathomorphology hypo- and vitamin deficiency . Diseases caused by human activity and the influence of the external environment.	2.0	1
33.	Topic 33. Practical lesson 34. Diseases of the hard tissues of the tooth (caries, non-cariou lesions), pulpitis, periodontitis , periostitis, osteomyelitis of the jaw bones.	2.0	1
34.	Topic 34. Practical lesson 35. Periodontal diseases, inflammatory diseases of the lips, tongue, gums, oral mucosa. Defects in the development of the face, neck and organs of the oral cavity.	2.0	1
35.	Topic 35. Practical lesson 36. Diseases of the salivary glands - clinical and morphological features of the salivary glands, inflammatory diseases, autoimmune diseases, salivary stone disease, tumors and tumor-like diseases of salivary glands.	2.0	1
36.	Topic 36. Practical lesson 37-38. Tumors and tumor-like processes of the organs of the oral cavity and jaw bones: odontogenic and non-odontogenic tumors, papilloma, cancer of the oral cavity, precancerous changes (leukoplakia), non-epithelial tumors, tumors of the jaw bones (osteoblastoclastoma, osteoma, osteosarcoma, fibrous dysplasia, cherubism), jaw bones (follicular cyst, keratocyst , eruption cyst).	4.0	1
37.	Topic 37. Practical lesson 39. Practical skills for section: Diseases of hard tissues of the tooth. Periodontal diseases, inflammatory diseases of the lips, tongue, gums, oral mucosa. Defects in the development of the face, neck and organs of the oral cavity. Diseases of the salivary glands - clinical and morphological features of the salivary glands, inflammatory diseases, autoimmune diseases , salivary stone disease, tumors and tumor-like diseases of salivary glands. Tumors and tumor-like processes of the organs of the oral cavity and jaw bones.	2.0	1
38.	Topic 38. Practical lesson 40. General concepts of human infectious pathology. Classification of infectious diseases . Intestinal infectious diseases.	2.0	1
39.	Topic 39. Practical lesson 41. Viral airborne infections. Corona virus disease. HIV infection and AIDS. Rabies.	2.0	1

40.	Topic 40. Practical lesson 42. Childhood infections.	2.0	1
41.	Topic 41. Practical lesson 43. Tuberculosis.	2.0	1
4 2 .	Topic 42. Practical lesson 44. Sepsis. Syphilis.	2.0	1
43.	Topic 43. Practical lesson 45. Practical skills for section: Pathomorphology of infectious diseases.	2.0	1
44.	Topic 44. Practical lesson 46-48. Test control of knowledge. Overview and description of micro and macro preparations. Preparing for the exam.	6.0 _	1
	TOTAL	96	

The head of the department Assoc. Lytvynenko M.V.