Khanty-Mansiysk Autonomous Okrug-Ugra
"Surgut State University"

Approved by
Deputy Rector for Academic Affairs
_____ E.V. Konovalova
"11" June 2026, Record 5

CLINICAL PATHOLOGICAL ANATOMY

Department **Pathophysiology and general pathology**

Curriculum s310501-ЛечДелоИн-26-6.xml
Specialty 31.05.01 General Medicine

Qualification **General Practitioner**

Form of education **Full-time**

Total (in credits) **2**

Total academic hours 72
including:
Contact 36
Self-study 36

Control:
Credit 11th term

Academic year (Term)	**11 (6.1)**		**Total**	
Weeks	17 2/6			
Types of classes	Cur	Syl	Cur	Syl
Lectures	4	4	4	4
Practical	32	32	32	32
Contact	36	36	36	36
Self-study	36	36	36	36
Control hours	-	-	-	-
Total	72	72	72	72

The Syllabus is compiled by:
Doctor of Medicine Professor Naumova L.A.

The Syllabus
CLINICAL PATHOLOGICAL ANATOMY

Developed in accordance with Federal State Educational Standard:

Federal State Educational Standard of higher education in the specialty 31.05.01 General medicine (Order of the Ministry of Education and Science of the Russian Federation on August 12, 2020 No. 988)

Based on the Curriculum:
31.05.01 GENERAL MEDICINE
Specialization: General Medicine
Approved by the Academic Council of Surgut State University, "11" June 2026, Record No 5

The Syllabus was approved by the department
Pathophysiology and General Pathology

Head of Department, Doctor of Medicine, Professor Kovalenko L.V.

1. COURSE OBJECTIVES	
1.1	To systematize knowledge about the structural foundations and functional manifestations of the most important pathological processes in the human body; knowledge of the logic of the development of pathological processes that form the essence of human diseases, cause-and-effect relationships; the mechanisms of development (pathogenesis) of the most important human diseases, their outcomes and complications, to develop practical skills in clinical-morphological comparisons, the foundations of general pathological, or clinical, thinking, and correct diagnosis based on the analysis of a variety of (clinical-anamnestic, laboratory, functional, morphological, etc.) data on the process or patient, and the formation of a holistic (systemic) view of pathology.

2. PLACE OF DISCIPLINE IN THE STRUCTURE OF THE OOP	
	Prerequisites:
2.1.	**Requirements for preliminary preparation of the student:**
2.1.1	General Education Module
2.1.2	Public Health and Healthcare. Healthcare Economics
2.1.2	Immunology and Allergology
2.1.3	Occupational Diseases
2.1.4	Obstetrics and Gynecology Internship
2.1.5	General Medicine Internship
2.1.6	Topographic Anatomy, Operative Surgery
2.1.7	Pathological Anatomy
2.1.8	Pathophysiology
2.1.9	Radiation Diagnostics
2.1.10	Therapy Internship
2.1.11	Surgical Internship
2.1.12	Clinical Pathological Physiology
2.1.13	Pathological Syndromes in Clinical Medicine
2.1.14	Educational Internship
2.1.15	Physiological Foundations of Human Adaptation in the North
2.1.16	Diagnostic Internship
2.1.17	Biology
2.1.18	Physics, Mathematics
2.1.19	Chemistry
2.1.20	Biochemistry
2.1.21	Human Anatomy
2.1.22	Histology, Embryology, Cytology
2.1.23	Normal Physiology
2.1.24	Adaptive and Developmental Physiology
2.1.25	Microbiology, Virology
2.1.26	Educational Internship in Research (acquiring basic research skills)
2.1.27	Human Genetics
2.2	**Disciplines and practices for which mastery of this discipline (module) is necessary as a prerequisite:**
2.2.1	State Final Certification
2.2.2	Clinical Pharmacology
2.2.3	Preparation for and Passing the State Exam
2.2.4	Medical Rehabilitation

3. STUDENT COMPETENCIES DEVELOPED AS A RESULT OF LEARNING THE DISCIPLINE (MODULE)
GPC-4.1: Demonstrates knowledge of the fundamentals of instrumental diagnostic methods, an understanding of the physical principles of equipment operation for practical use – diagnosis and differential diagnosis of human diseases and their application in professional activities.
GPC-4.2: Demonstrates knowledge of instrumental and morphological criteria for disease diagnosis, and masters the methodology for interpreting the results of instrumental examination methods.
GPC-4.3: Conducts diagnostic searches for diseases using medical equipment (devices) to establish a diagnosis.

GPC-5.7: Demonstrates knowledge of the principles and methods of intravital and postnatal diagnostics, and the ability to conduct examinations for various nosologies in real-life clinical and forensic practice.

GPC-8.2: Demonstrates the ability to implement and monitor the effectiveness of patient medical rehabilitation, including when implementing individual rehabilitation and habilitation programs for individuals with disabilities.
PC-9.1: Conducts analysis of medical information
PC-9.2: Presents medical information based on evidence-based medicine

As a result of mastering the discipline, the student must

3.1	**Knowledge:**
3.1.1	The nature, development patterns, and clinical significance of the most important pathological processes in the human body; characteristic changes in internal organs in the most important human diseases; the theory of disease, nosology, and principles of disease classification based on their pathogenesis and morphogenesis;
3.1.2	The structural and functional foundations of diseases and pathological processes, their causes, main mechanisms of development and outcomes, and organ and system dysfunctions, as well as modern methods for their detection;
3.1.3	The theory of diagnosis, the logic of the diagnostic process, and the materialization (proof) of diagnosis. The specifics of collecting and analyzing patient complaints, anamnesis data, examination, and analysis of available data from additional research methods to construct a diagnostic hypothesis and conduct differential diagnosis, as well as construct a diagnostic algorithm based on various research methods that allow for the materialization of the disease substrate-laboratory, instrumental, pathological, and other studies;
3.1.4	Basic methods of intravital pathological examination and modern methods equivalent to morphological ones, allowing for the materialization of the disease substrate or diagnosis, and the drawing of conclusions about the pathological process or disease.
3.2.	**Be able to:**
3.2.1	Use educational, scientific, and popular science literature, as well as the internet, to master the training program;
3.2.2	Collect and analyze patient complaints and medical history data;
3.2.3	Evaluate the results of examinations, laboratory, instrumental, pathological, and other studies to identify conditions or establish the presence or absence of disease;
3.2.4	Evaluate morphofunctional, physiological states, and pathological processes in the human body and substantiate the nature of the process and its manifestations, conducting clinical and morphological comparisons;
3.1.5.	based on the descriptions received, express an opinion on the nature of the pathological process and its clinical manifestations, the presumptive diagnosis or the cause of death when solving situational problems, and formulate a pathological diagnosis.

4. STRUCTURE AND CONTENT OF THE DISCIPLINE (MODULE)						
Lesson code	**Name of sections and topics /type of lesson/**	**Semester / Course**	**Hours**	**Competencies**	**Literature**	**Note**
	Section 1.					
1.1	The nature, developmental patterns, and clinical significance of the most important general pathological processes. A group approach to the study of diseases based on the commonality of their pathogenesis and morphogenesis /Lecture/	11	2	GPC-4.1 GPC-4.2 GPC-4.3 GPC-5.7 GPC-8.2 PC-9.1 PC-9.2	L 1.1 L 1.2 L 1.3 L 2.1 L 3.1 E1E2 E3 E4 E5 E6 E7	
1.2	The structure and logic of diagnosis. Algorithm for constructing a diagnostic hypothesis. Differential diagnosis /Lecture/	11	2	GPC-4.1 GPC-4.2 GPC-4.3 GPC-5.7 GPC-8.2 PC-9.1 PC-9.2	L 1.1 L 1.2 L 1.3 L 2.1 L 3.1 E1E2 E3 E4 E5 E6 E7	

1.3	The nature, development patterns, and clinical significance of the most important general pathological processes. Cellular pathology as the basis of human pathology. Cellular and molecular mechanisms of the pathogenesis of the most important human diseases /Pr/	11	4	GPC-4.1 GPC-4.2 GPC-4.3 GPC-5.7 GPC-8.2 PC-9.1 PC-9.2	L 1.1 L 1.2 L 1.3 L 2.1 L 3.1 E1E2 E3 E4 E5 E6 E7	
1.4	The structure and logic of diagnosis. Algorithm for constructing a diagnostic hypothesis. Differential diagnosis /Pr/	11	4	GPC-4.1 GPC-4.2 GPC-4.3 GPC-5.7 GPC-8.2 PC-9.1 PC-9.2	L 1.1 L 1.2 L 1.3 L 2.1 L 3.1 E1E2 E3 E4 E5 E6 E7	
1.5	The subject and objectives of clinical pathological anatomy, methods of intravital morphological diagnostics, and their clinical significance /Pr/	11	4	GPC-4.1 GPC-4.2 GPC-4.3 GPC-5.7 GPC-8.2 PC-9.1 PC-9.2	L 1.1 L 1.2 L 1.3 L 2.1 L 3.1 E1E2 E3 E4 E5 E6 E7	
1.6	Modern methods of diagnostic imaging. Comparison of data from various levels and research methods as a way to materialize the disease substrate /Pr/	11	4	GPC-4.1 GPC-4.2 GPC-4.3 GPC-5.7 GPC-8.2 PC-9.1 PC-9.2	L 1.1 L 1.2 L 1.3 L 2.1 L 3.1 E1E2 E3 E4 E5 E6 E7	
1.7.	Emergency and extreme conditions. Terminal states – pre-agony, agony, clinical death. /Pr/	11	4	GPC-4.1 GPC-4.2 GPC-4.3 GPC-5.7 GPC-8.2 PC-9.1 PC-9.2	L 1.1 L 1.2 L 1.3 L 2.1 L 3.1 E1E2 E3 E4 E5 E6 E7	
1.8	Colloquium 1. Defense of solutions to clinical problems /Pr/	11	4	GPC-4.1 GPC-4.2 GPC-4.3 GPC-5.7 GPC-8.2 PC-9.1 PC-9.2	L 1.1 L 1.2 L 1.3 L 2.1 L 3.1 E1E2 E3 E4 E5 E6 E7	
1.9	Colloquium 2. Defense of abstracts /Pr/	11	4	GPC-4.1 GPC-4.2 GPC-4.3 GPC-5.7 GPC-8.2 PC-9.1 PC-9.2	L 1.1 L 1.2 L 1.3 L 2.1 L 3.1 E1E2 E3 E4 E5 E6 E7	
1.10	Final lesson /Pr/	11	4	GPC-4.1 GPC-4.2 GPC-4.3 GPC-5.7 GPC-8.2 PC-9.1 PC-9.2	L 1.1 L 1.2 L 1.3 L 2.1 L 3.1 E1E2 E3 E4 E5 E6 E7	
1.11	The nature, development patterns, and clinical significance of the most important general pathological processes. Cellular pathology as the basis of human pathology. Cellular and molecular mechanisms of the pathogenesis of the most important human diseases/Iw/	11	5	GPC-4.1 GPC-4.2 GPC-4.3 GPC-5.7 GPC-8.2 PC-9.1 PC-9.2	L 1.1 L 1.2 L 1.3 L 2.1 L 3.1 E1E2 E3 E4 E5 E6 E7	

1.12	The structure and logic of diagnosis. Algorithm for constructing a diagnostic hypothesis. Differential diagnosis. /Iw/	11	4	GPC-4.1 GPC-4.2 GPC-4.3 GPC-5.7 GPC-8.2 PC-9.1 PC-9.2	L 1.1 L 1.2 L 1.3 L 2.1 L 3.1 E1E2 E3 E4 E5 E6 E7	
1.13	The subject and objectives of clinical pathological anatomy, methods of intravital morphological diagnostics, and their clinical significance. /Iw/	11	4	GPC-4.1 GPC-4.2 GPC-4.3 GPC-5.7 GPC-8.2 PC-9.1 PC-9.2	L 1.1 L 1.2 L 1.3 L 2.1 L 3.1 E1E2 E3 E4 E5 E6 E7	
1.14	Modern methods of diagnostic imaging. Comparison of data from various levels and research methods as a way to materialize the disease substrate. /Iw/	11	4	GPC-4.1 GPC-4.2 GPC-4.3 GPC-5.7 GPC-8.2 PC-9.1 PC-9.2	L 1.1 L 1.2 L 1.3 L 2.1 L 3.1 E1E2 E3 E4 E5 E6 E7	
1.15	Emergency and extreme conditions. Terminal states – pre-agony, agony, clinical death. /Iw/	11	4	GPC-4.1 GPC-4.2 GPC-4.3 GPC-5.7 GPC-8.2 PC-9.1 PC-9.2	L 1.1 L 1.2 L 1.3 L 2.1 L 3.1 E1E2 E3 E4 E5 E6 E7	
1.16	Colloquium 1. Defense of solutions to clinical problems /Iw/	11	5	GPC-4.1 GPC-4.2 GPC-4.3 GPC-5.7 GPC-8.2 PC-9.1 PC-9.2	L 1.1 L 1.2 L 1.3 L 2.1 L 3.1 E1E2 E3 E4 E5 E6 E7	
1.17	Colloquium 2. Defense of abstracts /Iw/	11	5	GPC-4.1 GPC-4.2 GPC-4.3 GPC-5.7 GPC-8.2 PC-9.1 PC-9.2	L 1.1 L 1.2 L 1.3 L 2.1 L 3.1 E1E2 E3 E4 E5 E6 E7	
1.18	Defense of solutions to problems and abstracts /Iw/	11	5	GPC-4.1 GPC-4.2 GPC-4.3 GPC-5.7 GPC-8.2 PC-9.1 PC-9.2	L 1.1 L 1.2 L 1.3 L 2.1 L 3.1 E1E2 E3 E4 E5 E6 E7	

5. ASSESSMENT TOOLS

5.1. Tests and tasks

Supplement 1

5.2. Assessment tools

Supplement 1

6. COURSE (MODULE) RESOURCES

6.1. Recommended literature

6.1.1. Main literature

	Authors, compilers	Title	Publisher, year	amount
L1.1	Ivashkin V.T., Okhlobystin A.V.	Internal Diseases. Volume II: textbook	Moscow: GEOTAR-Media, 2022, electronic resource	1

L1.2	Martynov A.I., Kobalava Z.D., Moiseev S.V.	Internal Diseases. Volume II: textbook	Moscow: GEOTAR-Media, 2022, electronic resource	1
L1.3	Martynov A.I., Kobalava Z.D., Moiseev S.V.	Internal Diseases. Volume I: textbook	Moskva: GEOTAR- Media, 2022,	1

6.1.2. Additional literature

	Authors, compilers	Title	Publisher, year	amount
L2.1	Naumova L. A.	General pathological anatomy: Guidance	Surgut: Izdatel'skiy	23

6.1.3. Methodical development

	Authors, compilers	Title	Publisher, year	amount
L3.1	I.V. Samsonova, O.V. Lesnichaya	Pathological anatomy. Lecture course: Part I. General pathology	Vitebsk, VSMU, 2019, electronic resource	1

6.3.2 Information Referral systems

6.2. The list of resources information and telecommunications network "Internet"

E1	Pathological anatomy. Clinical pathological anatomy https://pirogov-university.com
E2	HighWire https://lib.unn.ru
E3	Russkiy meditsinskiy zhurnal [Russian Medical Journal] https://www.rmj.ru
E4	Antibiotiki I khimioterapiya [Antibiotics and Chemotherapy] https://www.antibioticschemotherapy.ru
E5	Vestnik aritmologii [Arrythmology Herald] https://vestar.elpub.ru/
E6	Sakharniy diabet [Diabetes Mellitus] https://vestar.elpub.ru
E7	Vrach [General Practicioner] https://vrachu.ru/

6.3.1 List of software

6.3.1.1	Microsoft operating systems, Microsoft Office application package

6.3.2 Reference systems

6.3.2.1	"Garant", "Consultant Plus", "Consultant Region"

7. MATERIAL AND TECHNICAL SUPPORT OF DISCIPLINE (MODULE)

7.1	Classrooms for lectures, practical classes, group and individual consultations, monitoring and intermediate certification are equipped with: typical classroom furniture, technical teaching aids, employees for the presentation of educational information; classroom of "Vikrhov" pathology, microscopes, posters, micro- and macro-slides.