



# **PATHOLOGICAL BASIS OF THE DISEASE**

**THIRD YEAR OF STUDIES**

School year  
2023/2024.

**PATHOLOGICAL ANATOMY**

Subject:

## **PATHOLOGICAL ANATOMY**

The subject is evaluated with 18 ECTS. There are 9 hours of active classes per week (4 hours of lectures, 4 hours of work in a small group, and 1 hour of autopsy)

## TEACHERS AND ASSOCIATES:

	<b>Name and surname</b>	<b>Email</b>	<b>Vocation</b>
1.	Milena Vuletic	milena.vuletic@gmail.com	assistant professor
2.	Milica Mijovic	milicavancetovic@yahoo.com	profesor
3.	Milena Ilic	lena.ilic@gmail.com	assistant
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## COURSE STRUCTURE:

	<b>The name of the segment</b>	<b>weeks</b>	<b>Lectures weekly</b>	<b>Work in a small group per week</b>	<b>Autopsies weekly</b>	<b>Teacher - head of the segment</b>
1	General pathology	10	4	4	1	Asst. Prof. Milena Vuletic
2	Special pathology	20	4	4	1	Asst. Prof. Milena Vuletic

## EVALUATION:

By fulfilling the pre-examination obligations and passing the final (oral) exam, the student can achieve a maximum of 100 points. The final grade is formed on the basis of the number of points gained in the following ways:

### PRE-EXAM ACTIVITIES

Activity during class: In this way, the student can earn up to 30 points by answering two exam questions from that week of class at the seminar and, in accordance with the demonstrated knowledge, earns 0-1 points.

### FINAL EXAM

**Test:** In this way, the student can gain up to 10 points (20 questions, each question 0.5 points).

**Microscopic preparations:** In this way, the student can gain up to 10 points by drawing a combination of 5 tiles, each worth 2 points.

**Oral exam:** In this way, the student can gain up to 50 points by answering one question from 5 different areas, and each exam question is evaluated with points from 1 to 10. 0 points on the exam question represent the end of the exam. A student has the right to take the final oral exam if he has achieved more than 50% points in the pre-exam activities. Postponed passing of the final oral exam (in the following exam periods) does not reduce the number of points used to define the final grade.

MAXIMUM POINTS					
	Activity during class	Test	Microscopic preparations	Oral exam	Σ
POINTS	30	10	10	50	100

### The final grade is formed as follows

In order to pass the course, the student must obtain a minimum of 51 points in the pre-exam activities and in the final oral exam. In order to pass the exam, the student must:

1. Obtain more than 50% points in each form of activity (class activity)
2. Pass the final oral exam (test, microscopic preparations and oral answer), i.e. have more than 50% correct answers.

the number of points	grade
0 - 50	5
51 - 60	6
61 - 70	7
71 - 80	8
81 - 90	9
91 - 100	10

## **FINAL GRADE**

**Activity in  
class  
0-30 POINTS**

### **EVALUATION OF ACTIVITIES**

2 questions each week  
Each question is worth 0-0.5 points

**Test  
0-10 POINTS**

### **EVALUATION OF THE TEST**

The test has 20 questions  
Each question is worth 0.5 points

**Microscopic  
preparations  
0-10 POINTS**

### **EVALUATION OF MICROSCOPIC PREPARATIONS**

5 preparations  
Each preparation is worth 2 points

**Oral exam  
0-50 POINTS**

### **EVALUATION OF THE ORAL EXAMINATION**

The exam has 5 questions  
Each question is worth 10 points

**LITERATURE:**

<b>BOOK TITLE</b>	<b>THE AUTHOR</b>	<b>PUBLISHER</b>	<b>THE LIBRARY</b>
Robbins Basic Pathology	Kumar, Abbas, Fausto, Mitchel	DATA STATUS, Belgrade 2010	YES

# THE PROGRAM:

## GENERAL PATHOLOGY

TEACHING UNIT 1 (FIRST WEEK):

### INTRODUCTION TO PATHOLOGY, CELL DAMAGE, ADAPTATIONS, DEPOSITION OF ORGANIC AND INORGANIC MATTER, DEGENERATION AND NECROSIS

lectures - 4 hours

**Introduction to pathology.** Subject and significance of pathology. The importance of pathology in the diagnosis, therapy, and prognosis of diseases and in scientific and research work. Knowledge of basic diagnostic methods in pathology (Autopsy, Biopsy, and taking samples for pathohistological examination, Cytodiagnosics). Experiment and the importance of experimental pathology.

**Adaptation processes:** Atrophy, hypertrophy, hyperplasia, and metaplasia. Pathology of cells and intercellular structures

**Etiological factors and pathogenesis of cellular damage.** Reversible (cloudy swelling, vacuolar and hydropic degeneration, fatty change) and irreversible cell damage (necrosis, gangrene). Cell aging. Ultrastructural changes in damaged and dead cells. Apoptosis.

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work in a small group 5 hours

pathohistological exercises 2 hours

Hypertrophy myocardii  
Hyperplasia glandularis endometrii  
cystica Atrophia fusca hepatis

seminar 2 hours + 1 hour autopsy

Adaptation processes. Causes and mechanisms of cell damage. The role of free radicals in cell damage  
Necrosis. Apoptosis. Intracellular accumulations. Hyaline change. Calculus (urinary and biliary calculi). Dystrophic and metastatic calcification.  
Recapitulation of knowledge from part of the theoretical material.

TEACHING UNIT 2 (SECOND WEEK):

### INTRODUCTION TO PATHOLOGY, CELL DAMAGE, ADAPTATIONS, DEPOSITION OF ORGANIC AND INORGANIC MATTER, DEGENERATION AND NECROSIS

lectures - 4 hours

**Deposition of organic and inorganic substances (intracellular accumulation):** Intracellular accumulation of water, lipids, and carbohydrates. Pigment deposition. Pathological calcifications. Bilirubin metabolism disorder. Deposition of uric acid and its salts.

Creating calculus and dividing them. Hyaline and fibrinoid change.

work in a small group 5 hours

pathohistological exercises 2 hours

Hypertrophy myocardii  
Hyperplasia glandularis endometrii  
cystica Atrophia fusca hepatis

seminar 2 hours + 1 hour autopsy

Adaptation processes. Causes and mechanisms of cell damage. The role of free radicals in cell damage  
Necrosis. Apoptosis. Intracellular accumulations. Hyaline change. Calculus (urinary and biliary calculi). Dystrophic and metastatic calcification.  
Recapitulation of knowledge from part of the theoretical material..

TEACHING UNIT 3 (THIRD WEEK):

**PATHOLOGY OF CIRCULATION DISORDERS**

lectures - 4 hours

**Circulation disorders.**

Active and passive hyperemia. Congestion of lungs, liver and spleen. Bleeding pathology and bleeding nomenclature. Hemostasis. Disturbance of lymph and electrolyte circulation. Obstructive circulatory disorders: ischemia and infarction, thrombosis, embolism, DIK, Pathology of edema: division, mechanism of formation and morphology of edema. Pathology of shock (cardiogenic, hypovolemic and septic).

work in a small group 5 hours

pathohistological exercises 2 hours	seminar 2 hours + 1 hour autopsy
Haemorrhagia cerebri Thrombus venae in organisationem Infarctus anaemicus renis Infarctus haemorrhagicus pulmonis	Thrombosis. Embolism. Shock. Edema. Hyperemia and congestion. Hemorrhages. Hemostasis. Disseminated intravascular coagulation Pulmonary and systemic thromboembolism. Heart attack. Recapitulation of knowledge from part of the theoretical material

TEACHING UNIT 4 (FOURTH WEEK):

**TISSUE REPAIR PROCESSES**

lectures - 4 hours

**Tissue repair processes.**

Regeneration. Tissue repair. Wound healing. Organization.

work in a small group 5 hours

pathohistological exercises 2 hours	seminar 2 hours + 1 hour autopsy
Haemorrhagia cerebri Thrombus venae in organisationem Infarctus anaemicus renis Infarctus haemorrhagicus pulmonis	Regeneration. Repair with connective tissue. Wound healing. Recapitulation of knowledge from part of the theoretical material



TEACHING UNIT 5 (FIFTH WEEK):

**PATHOLOGY OF GENETICALLY CONDITIONED DISEASES. DISORDERS OF DEVELOPMENT. PEDIATRIC PATHOLOGY.**

lectures - 4 hours

**Genetic diseases.** Chromosome damage. Classification of genetic diseases. Monogenic and polygenic diseases. Cytogenic disorders. Karyotype. Diagnostics of genetic diseases.

Developmental disorders. Pathology of genetically determined diseases.

**Pediatric pathology.** Developmental disorders and their basic mechanisms of occurrence. Classification of developmental disorders. Diseases of newborns and children. Childhood tumors.

work in a small group 5 hours

pathohistological exercises 2 hours	seminar 2 hours + 1 hour autopsy
Degeneratio parenchimatosa renis Steatosis hepatis Degeneratio hyalinae vasorum lienis Degeneratio amyloidea renis Infarctus myocardii Encephalomalacia alba Lymphadenitis tuberculosa Haemosiderosis pulmonis secundaria	Congenital anomalies, Perinatal infections, Fetal erythroblastosis, Mechanisms of autoimmune diseases. Primary immunodeficiencies, Acquired immunodeficiency syndrome, Systemic lupus erythematosus. Systemic sclerosis. Sjogren's syndrome. Inflammatory myopathies. Mixed disease. connective tissue. Transplantation and explantation. Amyloidosis Recapitulation of knowledge from part of the theoretical material

TEACHING UNIT 6 (SIXTH WEEK):

**IMMUNO PATHOLOGY, TRANSPLANTATION AND EXPLANTATION. AMYLOIDOSIS**

lectures - 4 hours

**Immunopathology.** Immunocompetent cells. Hypersensitive immune reactions. Primary and acquired immunodeficiency diseases. Autoimmune diseases

**Transplantation and explantation.** Division of transplants according to biological characteristics and anatomical localization. General conditions for transplant success. Complications of transplantation. Graft rejection. The concept and importance of explantation for scientific and research work.

**Amyloidosis:** classification, morphology of amyloidosis. Systemic and isolated amyloidosis. Clinical manifestations of amyloidosis. Diagnosis and prognosis of amyloidosis.

work in a small group 5 hours

pathohistological exercises 2 hours	seminar 2 hours + 1 hour autopsy
Degeneratio parenchimatosa renis Steatosis hepatis Degeneratio hyalinae vasorum lienis Degeneratio amyloidea renis Infarctus myocardii Encephalomalacia alba Lymphadenitis tuberculosa Haemosiderosis pulmonis secundaria	Congenital anomalies, Perinatal infections, Fetal erythroblastosis, Mechanisms of autoimmune diseases. Primary immunodeficiencies, Acquired immunodeficiency syndrome, Systemic lupus erythematosus. Systemic sclerosis. Sjogren's syndrome. Inflammatory myopathies. Mixed disease. connective tissue. Transplantation and explantation. Amyloidosis Recapitulation of knowledge from part of the theoretical material

TEACHING UNIT 7 (SEVENTH WEEK)

**PATHOLOGY OF INFLAMMATION**

lectures - 4 hours

**Pathology of inflammation**

Definition, terminology and classification of inflammation.

**Acute inflammation** (changes in blood flow and vasculature, cellular events). Signs of inflammation. Mediators of the inflammatory reaction. Spread of inflammation and sepsis. Cure inflammation. Acute exudative inflammations (serous, fibrinous, purulent, catarrhal, hemorrhagic).

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work in a small group 5 hours

pathohistological exercises 2 hours	seminar 2 hours + 1 hour autopsy
Appendicitis phlegmonosa Abscessus hepatis Granuloma corporis alieni Bronchopneumonia fibrinoso purulenta	Definition of inflammation, General characteristics of inflammation, Acute inflammation: cellular events, vascular disorders and outcome Morphological types of inflammation, Chronic stunning: definition, causes, morphological characteristics. Granulomatous inflammation: tuberculosis, syphilis, cat scratch disease. Systemic effects of inflammation. Recapitulation of knowledge from part of the theoretical material

TEACHING UNIT 8 (EIGHTH WEEK)

**PATHOLOGY OF INFLAMMATION**

lectures - 4 hours

**Chronic inflammation.** Specific granulomatous inflammations (TBC, syphilis, leprosy, cat scratch disease). "Foreign body" type granuloma. Viral, fungal and parasitic infections.

work in a small group 5 hours

pathohistological exercises 2 hours	seminar 2 hours + 1 hour autopsy
Appendicitis phlegmonosa Abscessus hepatis Granuloma corporis alieni Bronchopneumonia fibrinoso purulenta	Definition of inflammation, General characteristics of inflammation, Acute inflammation: cellular events, vascular disorders and outcome Morphological types of inflammation, Chronic inflammation: definition, causes, morphological characteristics. Granulomatous inflammation: tuberculosis, syphilis, cat scratch disease. Systemic effects of inflammation. Recapitulation of knowledge from part of the theoretical material

TEACHING UNIT 9 (NINTH WEEK):

**TUMOR PATHOLOGY**

lectures - 4 hours

**General tumor pathology.** Definition and classification of tumors according to histogenesis and biological behavior. Morphological characteristics of benign tumors. Benign epithelial tumors (polyps, papillomas, adenomas, cystadenomas). Benign mesenchymal tumors. Morphological and clinical characteristics of malignant tumors. Malignant epithelial tumors of ectodermal, endodermal, and mesodermal origin. Differentiation and tumor anaplasia. Tumor growth rate. Local invasion. Metastasis and ways of metastasis. Molecular aspects of invasion and metastasis. Dysontogenetic tumors: hamartomas, choristomas and teratomas. Neuroendocrine tumors. Tumor antigens and tumor markers. Determining the degree of differentiation and tumor stage. Etiology and pathogenesis of malignant tumors. Premalignant lesions and early cancers. Tumor epidemiology.

work in a small group 5 hours

pathohistological exercises 2 hours	seminar 2 hours + 1 hour autopsy
Papilloma cutis Leiomyoma Haemangioma simplex Adenocarcinoma intestini colonis	Tumor pathology: Definition and classification of tumors. Tumor epidemiology Characteristics of benign and malignant tumors Tumor evolution: precancerous lesions and early cancers Molecular mechanisms of multistage carcinogenesis Host defense against tumors Grading and staging of tumors Clinical characteristics of tumors Diagnosis of tumors Recapitulation of knowledge from part of the theoretical material.

TEACHING UNIT 10 (TENTH WEEK):

**TUMOR PATHOLOGY**

lectures - 4 hours

**Carcinogenesis:** Carcinogenic agents and their cellular interactions. Molecular basis and stages of carcinogenesis.

work in a small group 5 hours

pathohistological exercises 2 hours	seminar 2 hours + 1 hour autopsy
Papilloma cutis Leiomyoma Haemangioma simplex Adenocarcinoma intestini colonis	Tumor pathology: Definition and classification of tumors. Tumor epidemiology Characteristics of benign and malignant tumors Tumor evolution: precancerous lesions and early cancers Molecular mechanisms of multistage carcinogenesis Host defense against tumors Grading and staging of tumors Clinical characteristics of tumors Diagnosis of tumors Recapitulation of knowledge from part of the theoretical material

# SPECIAL PATHOLOGY

TEACHING UNIT 11 (ELEVENTH WEEK):

## PATHOLOGY OF THE CARDIOVASCULAR SYSTEM

lectures - 4 hours

**Pathology of the cardiovascular system.**

Congenital heart defects. Ischemic heart disease (angina pectoris, acute myocardial infarction, chronic ischemic disease, sudden cardiac death). Hypertensive heart diseases: arterial hypertension (division in relation to the clinical course, pathogenesis, secondary hypertension, malignant hypertension, vascular changes in hypertension), pulmonary hypertension. Acute and chronic pulmonary heart. Valve diseases: rheumatic fever, chronic valve disease (acquired heart defects), infectious and non-infectious endocarditis, complications of implanting artificial heart valves. Myocarditis. Cardiomyopathies. Heart failure. Tumors of the heart. Pericardial diseases.

work in a small group 5 hours

pathohistological exercises 2 hours	seminar 2 hours + 1 hour autopsy
<p>Atheromatosis aortae Nephrocirrhosis arterio et arteriolosclerotica Myocarditis virosa Infarctus myocardii</p>	<p>Congenital heart disease Ischemic heart disease Hypertensive heart disease Valvular heart disease Cardiomyopathies Heart failure Pericardial diseases Tumors of the heart Atherosclerosis. Arteriolosclerosis. Vasculitis. Dystrophic processes of arteries Aneurysms: Vasculitis Recapitulation of knowledge from part of the theoretical material.</p>

TEACHING UNIT 12 (TWELFTH WEEK):

## PATHOLOGY OF THE CARDIOVASCULAR SYSTEM

lectures - 4 hours

**Pathology of the arterial system.** Atherosclerosis. Epidemiology and risk factors, pathogenesis, morphology and clinical significance. Arteriolosclerosis. Vasculitis. Dystrophic processes of arteries. Aneurysms: classification, pathogenesis, morphology and clinical course. Vein pathology.

work in a small group 5 hours

pathohistological exercises 2 hours	seminar 2 hours + 1 hour autopsy
<p>Atheromatosis aortae Nephrocirrhosis arterio et arteriolosclerotica Myocarditis virosa Infarctus myocardii</p>	<p>Congenital heart disease. Ischemic heart disease Hypertensive heart disease Valvular heart disease Cardiomyopathies Heart failure Pericardial diseases Tumors of the heart Atherosclerosis. Arteriolosclerosis. Vasculitis. Dystrophic processes of arteries Aneurysms: Vasculitis Recapitulation of knowledge from part of the theoretical material.</p>

TEACHING UNIT 13 (WEEK THIRTEEN):

**PATHOLOGY OF THE RESPIRATORY SYSTEM**

lectures - 4 hours

**Pathology of the upper respiratory system:**

Pathology of the oral cavity, nose and paranasal sinuses: Inflammation and tumors.

Pathology of the larynx, tonsils and tracheobronchial tree: Inflammation and tumors. Pathology of salivary glands and neck.

**Pathology of the mediastinum:** Acute and chronic mediastinitis. Benign and malignant tumors of the mediastinum.

**Pathology of the lower respiratory system:** Pathology of the bronchi: inflammation, chronic obstructive pulmonary disease, bronchial asthma, changes in the lumen of the bronchi (obstructions, strictures, bronchiectasis). Pathology of the lungs: Congenital anomalies. Circulatory disorders in the lungs: edema, embolism and lung infarction, bleeding.

work in a small group 5 hours

pathohistological exercises 2 hours

Pneumonia fibrinosa seu cruposa  
Pneumonia chronica  
TBC milliaris pulmonum  
Carcinoma bronchigenes pulmonis microcellulare

seminar 2 hours + 1 hour autopsy

Congenital anomalies of the respiratory system  
Atelectasis. Acute respiratory distress syndrome  
Obstructive lung diseases: Emphysema. Chronic bronchitis, bronchial asthma, bronchiectasis. Lung infections. Diffuse interstitial lung diseases  
Lung tumors. Diseases of the pleura. Pneumoconiosis. Damage caused by ionizing radiation. Recapitulation of knowledge from part of the theoretical material.

TEACHING UNIT 14 (FOURTEENTH WEEK):

**PATHOLOGY OF THE RESPIRATORY SYSTEM**

lectures - 4 hours

**Pathology of the lower respiratory system:**

Changes in air content: atelectasis, emphysema, respiratory distress syndrome.

Lung inflammations: lobar pneumonia, bronchopneumonia - lobular pneumonia, abscess, lung gangrene, interstitial pneumonia, fungal and parasitic inflammations, tuberculosis.

Lung tumors: benign, primary malignant, and secondary tumors.

**Pathology of the pleura:** inflammation, foreign content in the pleural cavity (pneumothorax, hydrothorax, hemothorax). Benign and malignant tumors of the pleura. Secondary tumors of the pleura.

Diseases caused by the environment.

**Pneumoconiosis:** anthracosis, miner's pneumoconiosis, Kaplan syndrome, silicosis, asbestosis, berylliosis. Damage caused by ionizing radiation.

work in a small group 5 hours

pathohistological exercises 2 hours

Pneumonia fibrinosa seu cruposa  
Pneumonia chronica  
TBC milliaris pulmonum  
Carcinoma bronchigenes pulmonis microcellulare

seminar 2 hours + 1 hour autopsy

Congenital anomalies of the respiratory system.  
Atelectasis. Acute respiratory distress syndrome  
Obstructive lung diseases: Emphysema. Chronic bronchitis, bronchial asthma, bronchiectasis. Lung infections. Diffuse interstitial lung diseases.  
Lung tumors. Diseases of the pleura. Pneumoconiosis. Damage caused by ionizing radiation. Recapitulation of knowledge from part of the theoretical material.

TEACHING UNIT 15 (FIFTEENTH WEEK):

**PATHOLOGY OF THE HEMATOPOIETIC SYSTEM AND LYMPH TISSUE**

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lectures - 4 hours

**Pathology of the lymphatic and hematopoietic system.**

Reactive changes in lymphatic tissue. Anemia. Polycythemia. Leukemia. Myeloproliferative diseases.

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work in a small group 5 hours

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pathohistological exercises 2 hours	seminar 2 hours + 1 hour autopsy
Lymphoma non Hodgkin Lymphoma Hodgkin Leucosis lymphatica hepatis.	Coagulation disorders Anemia Lymphomas: non-Hodgkin's, Hodgkin's lymphoma. Leukemias and myeloproliferative diseases. Recapitulation of knowledge from part of the theoretical material.

TEACHING UNIT 16 (SIXTEENTH WEEK):

**PATHOLOGY OF THE HEMATOPOIETIC SYSTEM AND LYMPH TISSUE**

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lectures - 4 hours

**Pathology of the lymphatic and hematopoietic system.**

Lymphomas: etiology, pathogenesis, clinical signs, classification, staging. Lymphoproliferative diseases. Non

**Hodgkin lymphomas:** classification and main characteristics of B cell lymphomas. Classification and main characteristics of T/NK cell lymphomas. Hodgkin's lymphoma: classification, staging.

**Diseases of the spleen:** Splenomegaly. Heart attack. Congenital anomalies. Rupture and tumors of the spleen  
Bone marrow pathology.

Pathology of the head, neck and mediastinum

**Thymus:** Congenital anomalies. Hyperplasias and tumors.

work in a small group 5 hours

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pathohistological exercises 2 hours	seminar 2 hours + 1 hour autopsy
Lymphoma non Hodgkin Lymphoma Hodgkin Leucosis lymphatica hepatis.	Coagulation disorders Anemia Lymphomas: non-Hodgkin's, Hodgkin's lymphoma. Leukemias and myeloproliferative diseases. Recapitulation of knowledge from part of the theoretical material.

TEACHING UNIT 17 (SEVENTEENTH WEEK):

**PATHOLOGY OF THE KIDNEY AND URINARY SYSTEM**

lectures - 4 hours

**Kidney pathology.** Congenital anomalies of the kidneys. Glomerular diseases: Etiopathogenesis of primary glomerular diseases. Primary glomerulonephritis that manifests clinically as nephrotic syndrome: minimal changes, focal segmental glomerulosclerosis, membranous (perimembranous) glomerulonephritis. Primary glomerulonephritis manifesting as a nephritic syndrome: focal glomerulonephritis, diffuse mesangioproliferative glomerulonephritis, diffuse proliferative endocapillary glomerulonephritis, diffuse membranoproliferative glomerulonephritis, glomerulonephritis with the formation of crescent formations, rapidly progressive glomerulonephritis, Gudpašče's syndrome. Changes in the kidneys in systemic connective tissue diseases, metabolic diseases, and systemic infections. Vasculopathies and vasculitis. Tubulointerstitial nephritis (pyelonephritis). Tubulointerstitial nephropathy (Balkan endemic nephropathy). Acute renal and chronic renal insufficiency. Kidney transplant. Hereditary nephropathies. Nephropathy of pregnant women. Radiation nephritis. Hydronephrosis. Nephrolithiasis. Kidney tumours.

work in a small group 5 hours

pathohistological exercises 2 hours

seminar 2 hours + 1 hour autopsy

Glomerulonephritis endocapilaris seu acuta  
Glomerulonephritis membranoproliferatica seu chronica  
Pyelonephritis chronic  
Carcinoma villosum (papillare) vesicae urinariae.

Congenital kidney anomalies. Cystic kidney diseases. Glomerular diseases: Primary glomerulonephritis. Hereditary nephritis. Glomerular lesions in systemic diseases. Diseases of tubules and interstitium. Kidney blood vessel diseases. Urolithiasis. Kidney tumors. Ureters: Obstructive lesions. Inflammations Urinary bladder: inflammations. Tumors of the urinary tract. Recapitulation of knowledge from part of the theoretical material.

TEACHING UNIT 18 (EIGHTEENTH WEEK):

**PATHOLOGY OF THE KIDNEY AND URINARY SYSTEM**

lectures - 4 hours

**Pathology of the lower urinary system.** Inflammation of the renal pelvis and ureter. Tumors of the renal pelvis and ureter. Urinary bladder: inflammations and tumors. Urethra: inflammations.

work in a small group 5 hours

pathohistological exercises 2 hours

seminar 2 hours + 1 hour autopsy

Glomerulonephritis endocapilaris seu acuta  
Glomerulonephritis membranoproliferatica seu chronica  
Pyelonephritis chronica  
Carcinoma villosum (papillare) vesicae urinariae

Congenital kidney anomalies. Cystic kidney diseases. Glomerular diseases: Primary glomerulonephritis. Hereditary nephritis. Glomerular lesions in systemic diseases. Diseases of tubules and interstitium. Kidney blood vessel diseases. Urolithiasis. Kidney tumors. Ureters: Obstructive lesions. Inflammation. Bladder: inflammation. Tumors of the urinary tract. Recapitulation of knowledge from part of the theoretical material



TEACHING UNIT 19 (NINETEENTH WEEK):

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**PATHOLOGY OF THE GASTROINTESTINAL TRACT**

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lectures - 4 hours

**Pathology of the oral cavity:** Congenital anomalies. Ulcerative and inflammatory lesions. Leukoplakia and erythroplakia. Tumors of the oral cavity and tongue. **Diseases of the salivary glands:** Inflammation and tumors. Pharynx and tonsils: Inflammation and tumors. **Esophageal pathology:** Congenital anomalies. Neuromuscular disorders. Inflammation. Varicose veins. Barrett's esophagus and tumors. **Stomach pathology:** congenital anomalies, gastritis, ulcerative lesions, peptic ulcer, precancerous conditions and tumors.

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work in a small group 5 hours

pathohistological exercises 2 hours	seminar 2 hours + 1 hour autopsy
Gastritis chronica Ulcus ventriculi Adenocarcinoma ventriculi Colitis chronica ulcerosa	<b>Oral cavity:</b> congenital anomalies. Ulcerative and inflammatory lesions. Precancerous lesions and tumors. Inflammatory, obstructive lesions and tumors of the salivary glands <b>Esophagus:</b> Congenital anomalies. Lesions associated with motor dysfunction. Esophagitis. Varicose veins. Esophageal tumors. Stomach: Congenital anomalies. Gastritis. Peptic ulcer and gastric ulcers. Tumors. <b>Small and large intestine:</b> Congenital anomalies. Enterocolitis. Malabsorption syndromes. Crohn's disease. Ulcerative colitis. Vascular disorders. Colon diverticulosis. Intestinal obstruction. Tumors. <b>Diseases of the peritoneum.</b> Recapitulation of knowledge from part of the theoretical material.

TEACHING UNIT 20 (Twentieth Week):

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**PATHOLOGY OF THE GASTROINTESTINAL TRACT**

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lectures - 4 hours

**Pathology of the small and large intestine. Small intestine:** Congenital anomalies. Diverticulosis. Malabsorption. Inflammation. Ischemic enteritis. Crohn's disease. Tuberculosis. Parasitic diseases. Ileus. Tumors. **Colon and anal region:** Congenital anomalies. Diverticulosis. Bacterial, toxic, parasitic, and ulcerative colitis. Tumors. **Appendix:** Inflammation and tumors. **Pathology of the peritoneum:** Inflammation and tumors.

work in a small group 5 hours

pathohistological exercises 2 hours	seminar 2 hours + 1 hour autopsy
Gastritis chronica Ulcus ventriculi Adenocarcinoma ventriculi Colitis chronica ulcerosa	<b>Oral cavity:</b> congenital anomalies. Ulcerative and inflammatory lesions. Precancerous lesions and tumors. Inflammatory, obstructive lesions and tumors of the salivary glands <b>Esophagus:</b> Congenital anomalies. Lesions associated with motor dysfunction. Esophagitis. Varicose veins. Esophageal tumors. <b>Stomach:</b> Congenital anomalies. Gastritis. Peptic ulcer and gastric ulcers. Tumors. <b>Small and large intestine:</b> Congenital anomalies. Enterocolitis. Malabsorption syndromes. Crohn's disease. Ulcerative colitis. Vascular disorders. Colon diverticulosis. Intestinal obstruction. Tumors. <b>Diseases of the peritoneum.</b> Recapitulation of knowledge from part of the theoretical material.

TEACHING UNIT 21 (TWENTY-FIRST WEEK):

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**HEPATOBIILIARY SYSTEM PATHOLOGY**

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lectures - 4 hours

**Congenital anomalies.** Degenerative and necrotic changes in hepatocytes. Acute viral hepatitis. Chronic hepatitis. Alcoholic liver disease. Liver abscess and toxic hepatitis. Liver cirrhosis. Primary and secondary liver tumors. **Liver diseases in pregnancy.** Circulatory disorders.

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work in a small group 5 hours

Pathohistological exercises 2 hours	seminar 2 hours + 1 hour autopsy
Hepatitis virosa Cirrhosis hepatis Carcinoma hepatis epatocellulare Adenocarcinoma ventriculi metastaticum in hepate	Jaundice and cholestasis. Viral hepatitis. Autoimmune hepatitis. Liver abscesses. Alcoholic liver disease. Metabolic diseases of the liver. Liver diseases in children. Circulation disorders and vascular diseases of the liver Cirrhosis of the liver. Liver tumors. Liver insufficiency Cholecystitis and cholelithiasis. Diseases of extrahepatic biliary ducts. Tumors. Pancreatitis. Tumors of the exocrine and endocrine pancreas. Diabetes mellitus. Recapitulation of knowledge from part of the theoretical material.

TEACHING UNIT 22 (TWENTY-SECOND WEEK):

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**HEPATOBIILIARY SYSTEM PATHOLOGY**

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lectures - 4 hours

**Diseases of the intrahepatic biliary tract.** Cholestasis and cholangitis. Calculus. Acute and chronic cholecystitis. Tumors of the gallbladder. Dysmetabolic hemopathies.

**Pathology of the exocrine and endocrine pancreas:** pancreatitis (acute and chronic). Tumors of the exocrine and endocrine pancreas. Diabetes mellitus.

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work in a small group 5 hours

Pathohistological exercises 2 hours	seminar 2 hours + 1 hour autopsy
Hepatitis virosa Cirrhosis hepatis Carcinoma hepatis epatocellulare Adenocarcinoma ventriculi metastaticum in hepate	Jaundice and cholestasis. Viral hepatitis. Autoimmune hepatitis. Liver abscesses. Alcoholic liver disease. Metabolic diseases of the liver. Liver diseases in children. Circulation disorders and vascular diseases of the liver Cirrhosis of the liver. Liver tumors. Liver insufficiency Cholecystitis and cholelithiasis. Diseases of extrahepatic biliary ducts. Tumors. Pancreatitis. Tumors of the exocrine and endocrine pancreas. Diabetes mellitus. Recapitulation of knowledge from part of the theoretical material.

TEACHING UNIT 23 (TWENTY-THIRD WEEK):

**PATHOLOGY OF THE ENDOCRINE SYSTEM AND BREAST**

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lectures - 4 hours

**Breast pathology.** Congenital anomalies. Fibrocystic breast disease. Inflammation of the breast. Proliferative and non-proliferative changes. Benign and malignant tumors. Diseases of the male breast.

**Pathology of the endocrine system.**

**Pituitary gland:** vascular diseases, traumatic, inflammatory lesions and tumors. **Thyroid gland:** Congenital anomalies, hypo- and hyperthyroidism, inflammations, goiters, tumors. **Parathyroid gland:** hypo and hyperparathyroidism, tumors.

work in a small group 5 hours

pathohistological exercises 2 hours	seminar 2 hours + 1 hour autopsy
Struma colloidis glandulae thyroideae Carcinoma papillare glandulae thyroideae Fibroadenoma mammae Carcinoma mammae	<b>Breast:</b> congenital anomalies. Inflammation. Fibrocystic changes, proliferative diseases of the breast. Tumors. Diseases of the male breast. <b>Pituitary gland:</b> Adenomas. Hypo- and hyperpituitarism. Posterior pituitary lobe syndrome. <b>Thyroid gland:</b> hypo- and hyperthyroidism. Tiroiditis. Graves' disease. Goiter. Tumors Parathyroid gland: Hypo- and hyperparathyroidism. Tumors. <b>Adrenal gland:</b> Adrenocortical hyperplasia - Adrenocortical insufficiency. Tumors of the adrenal cortex and medulla. Multiple endocrine neoplasia (MEN). Recapitulation of knowledge from part of the theoretical material

TEACHING UNIT 24 (TWENTY-FOURTH WEEK):

**PATHOLOGY OF THE ENDOCRINE SYSTEM AND BREAST**

lectures - 4 hours

**Pathology of the endocrine system.**

**Adrenal gland:** circulatory disorders, inflammation, tumors of the cortex and medulla. Neuroendocrinology of the GIT: hyperplasias and tumors.

**Endocrine pancreas:** insula cell hyperplasia and tumors. Multiple endocrine neoplasia type 1, 2 and 3.

work in a small group 5 hours

pathohistological exercises 2 hours	seminar 2 hours + 1 hour autopsy
Struma colloidis glandulae thyroideae Carcinoma papillare glandulae thyroideae Fibroadenoma mammae Carcinoma mammae	<b>Breast:</b> congenital anomalies. Inflammation. Fibrocystic changes, proliferative diseases of the breast. Tumors. Diseases of the male breast. <b>Pituitary gland:</b> Adenomas. Hypo- and hyperpituitarism. Posterior pituitary lobe syndrome. <b>Thyroid gland:</b> hypo- and hyperthyroidism. Tiroiditis. Graves' disease. Goiter. Tumors Parathyroid gland: Hypo- and hyperparathyroidism. Tumors. <b>Adrenal gland:</b> Adrenocortical hyperplasia - Adrenocortical insufficiency. Tumors of the adrenal cortex and medulla. Multiple endocrine neoplasia (MEN). Recapitulation of knowledge from part of the theoretical material

TEACHING UNIT 25 (TWENTY-FIFTH WEEK):

**PATHOLOGY OF THE MALE AND FEMALE GENITAL SYSTEM**

lectures - 4 hours

**Pathology of the female genital system.**

**Vulva:** Congenital anomalies, dystrophies, inflammations and tumors.

**Vagina:** Congenital anomalies. Inflammation. Cleanses. Precancerous lesions and tumors.

**Cervix:** Congenital anomalies. Inflammation. Precancerous lesions. SIL and squamous cell carcinoma.,

Tumors.

**Uterus:** Congenital anomalies. Inflammation. Endometriosis. Endometrial hyperplasia.

Tumors. Fallopian tubes: Congenital anomalies. Inflammation. Tumors.

**Ovaries:** Congenital anomalies. Inflammation. Non-neoplastic cysts and tumors.

**Gestational and placental diseases:** Disorders of early and late pregnancy. Abnormalities of the placenta.

Twin placentas. Inflammation of the placenta.

Toxemia of pregnancy (preeclampsia and eclampsia), gestational trophoblastic diseases.

**Pathology of pregnancy:** Ectopic pregnancy. Trophoblastic tumors.

work in a small group 5 hours

pathohistological exercises 2 hours	seminar 2 hours + 1 hour autopsy
Adenocarcinoma endometrii- endometroidni tip Cystadenoma papillare serosum ovarii Molla hydatidosa Seminoma testis	Vulva: Inflammations. Cleanses. Tumors Vagina: Congenital anomalies. Tumors. Cervix: Inflammations. Tumors Uterine body: inflammation. Endometriosis. Adenomyosis. Hyperplasia of the endometrium. Tumors. Ovaries and Fallopian tubes: Inflammation. Cleanses. Tumors. Gestational and placental diseases. Congenital anomalies of the male genital tract Penis: Inflammation. Tumors Testis and epididymis: Inflammations. Vascular disorders. Tumors Prostate: inflammation. Benign nodular hyperplasia. Tumors. Recapitulation of knowledge from the work theoretical material.

TEACHING UNIT 26 (TWENTY-SIX WEEK):

**PATHOLOGY OF THE MALE AND FEMALE GENITAL SYSTEM**

lectures - 4 hours

**Pathology of the male genital system.** Congenital anomalies of male genital organs. Inflammation and tumors of the testicles, epididymis and vas deferens. Prostate hyperplasia and tumors. Pathology of the penis and scrotum.

work in a small group 5 hours

pathohistological exercises 2 hours	seminar 2 hours + 1 hour autopsy
Adenocarcinoma endometrii- endometroidni tip Cystadenoma papillare serosum ovarii Molla hydatidosa Seminoma testis	Vulva: Inflammations. Cleanses. Tumors Vagina: Congenital anomalies. Tumors Cervix: Inflammations. Tumors Uterine body: inflammation. Endometriosis. Adenomyosis. Hyperplasia of the endometrium. Tumors. Ovaries and Fallopian tubes: Inflammation. Cleanses. Tumors. Gestational and placental diseases. Congenital anomalies of the male genital tract Penis: Inflammation. Tumors Testis and epididymis: Inflammations. Vascular disorders. Prostate tumors: inflammations. Benign nodular hyperplasia. Tumors. Recapitulation of knowledge from part of the theoretical material.

TEACHING UNIT 27 (WEEK TWENTY-SEVEN):

**PATHOLOGY OF THE CENTRAL AND PERIPHERAL NERVOUS SYSTEM**

lectures - 4 hours

**Pathology of the central nervous system.**

Congenital anomalies of the CNS. Pathology of increased intracranial pressure. Cerebro vascular disease. Brain infarction. Brain inflammations: Bacterial, viral and specific inflammations. Prion diseases.

work in a small group 5 hours

pathohistological exercises 2 hours	seminar 2 hours + 1 hour autopsy
Encephalomalatia alba. Leptomeningitis purulenta Meningeoma Glioblastoma multiforme	<b>Central nervous system:</b> Congenital anomalies. Brain edema. Increased intracranial pressure. Herniation and hydrocephalus. Cerebrovascular diseases. Infections. Prion diseases. Demyelinating diseases. Degenerative diseases. Metabolic diseases. Tumors. Recapitulation of knowledge from part of the theoretical material

TEACHING UNIT 28 (TWENTY-EIGHT WEEK):

**PATHOLOGY OF THE CENTRAL AND PERIPHERAL NERVOUS SYSTEM**

lectures - 4 hours

**Pathology of the central nervous system**

**Demyelinating diseases.** Neurodegenerative diseases. Congenital diseases of metabolism. Acquired metabolic and toxic diseases. Encephalopathies. Pathology of the pituitary gland and hypothalamus. Primary and secondary CNS tumors.

**Peripheral nerve and muscle pathology.**

Basic pathological processes of the peripheral nerve. Inflammatory, metabolic, toxic and inherited diseases. General muscle pathology. Neuromuscular diseases: myopathies and neuropathies. Tumors of the peripheral nervous system and neurocutaneous syndromes.

**Pathology of the senses.** Pathology of the eye. Diseases and tumors of the eyelids, lacrimal apparatus, eye socket, cornea, sclera, retina and court membrane. Trachoma. Cataract. Glaucoma. Ear pathology: diseases of the outer, middle and inner ear.

work in a small group 5 hours

pathohistological exercises 2 hours	seminar 2 hours + 1 hour autopsy
Encephalomalatia alba. Leptomeningitis purulenta Meningeoma Glioblastoma multiforme	<b>Central nervous system:</b> Congenital anomalies. Brain edema. Increased intracranial pressure. Herniation and hydrocephalus. Cerebrovascular diseases. Infections. Prion diseases. Demyelinating diseases. Degenerative diseases. Metabolic diseases. Tumors. Recapitulation of knowledge from part of the theoretical material

TEACHING UNIT 29 (TWENTY-NINTH WEEK):



## SKIN PATHOLOGY. SOFT TISSUE PATHOLOGY. PATHOLOGY OF THE BONE AND JOINT SYSTEM

lectures - 4 hours

**Skin pathology.** Degenerative and inflammatory changes in the skin. Precancerous skin lesions. Tumors of the skin, adnexa, sweat and sebaceous glands, and mesenchymal tumors. Adnexal diseases of the skin, hair and nails. Melanotic skin lesions.

work in a small group 5 hours

pathohistological exercises 2 hours	seminar 2 hours + 1 hour autopsy
<p>Carcinoma planocellulare /squamocellulare                      Carcinoma basocellulare                      Melanoma</p>	<p><b>Skin:</b> Inflammatory dermatoses. Bullous skin diseases. Precancerous lesions. Pigmentary changes on the skin. Tumors.  <b>Pathology of soft tissues:</b> Inflammatory processes. Tumors and tumor-like lesions of soft tissues  <b>Pathology of bone tissue:</b> Developmental anomalies. Remodeling of bone tissue. Osteonecrosis. Osteomyelitis. Osteoporosis. Metabolic diseases. Rickets. Osteomalacia. Tumors and tumor-like lesions.  <b>Joints:</b> Osteoarthritis. Rheumatoid arthritis. Infectious arthritis. Gout.                      Recapitulation of knowledge from part of the theoretical material</p>

TEACHING UNIT 30 (WEEK THIRTY):

**SKIN PATHOLOGY. SOFT TISSUE PATHOLOGY. PATHOLOGY OF THE BONE AND JOINT SYSTEM**

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lectures - 4 hours

**Tumors of soft tissues.** Tumors and tumor-like lesions of connective, fatty tissue and blood and lymphatic vessels.

**Bone pathology:** Inflammation. Aseptic bone necrosis. Changes due to metabolic and endocrine disorders. Osteoporosis. Primary and secondary tumors.

**Joint pathology:** Inflammation. Degenerative changes and tumors

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work in a small group 5 hours

pathohistological exercises 2 hours	seminar 2 hours + 1 hour autopsy
Carcinoma planocellulare /squamocellulare Carcinoma basocellulare. Melanoma	<b>Skin:</b> Inflammatory dermatoses. Bullous diseases Precancerous lesions. Pigmentary changes on the skin. Tumors. <b>Pathology of soft tissues:</b> Inflammatory processes. Tumors and tumor-like lesions of soft tissues. <b>Pathology of bone tissue:</b> Developmental anomalies. Remodeling of bone tissue. Osteonecrosis. Osteomyelitis. Osteoporosis. Metabolic diseases. Rickets. Osteomalacia. Tumors and tumor-like lesions. <b>Joints:</b> Osteoarthritis. Rheumatoid arthritis. Infectious arthritis. Gout. Recapitulation of knowledge from part of the theoretical material

## WEEKLY COURSE SCHEDULE

COURSE	MONDAY	WEDNESDAY
<b>PATHOLOGICAL ANATOMY</b> (4+3)	<b>LECTURES</b> <b>14:00 - 17:00</b> (H44)	<b>PRACTICE</b> <b>08:00 - 12:30</b> (R31-R32)

## LESSON SCHEDULE FOR PATHOLOGICAL ANATOMY

module	week	type	method unit name	a teacher
1	1	<b>L</b>	Introduction to pathology, cell damage, adaptations, deposition of organic and inorganic matter, degeneration and necrosis	
1	1	<b>E</b>	Pathohistological preparations of adaptation processes.	
1	1	<b>E/S</b>	Seminar: Adaptations. Reversible and irreversible cell damage. Deposition of organic and inorganic substances. Recapitulation of knowledge from part of the theoretical material	
1	2	<b>L</b>	Introduction to pathology, cell damage, adaptations, deposition of organic and inorganic matter, degeneration and necrosis	
1	2	<b>E</b>	Pathohistological preparations of adaptation processes	
1	2	<b>E/S</b>	Seminar: Adaptations. Reversible and irreversible cell damage. Deposition of organic and inorganic substances. Recapitulation of knowledge from part of the theoretical material	
1	3	<b>L</b>	Pathology of circulation disorders	
1	3	<b>E</b>	Pathohistological preparations of circulatory disorders	

## LESSON SCHEDULE FOR PATHOLOGICAL ANATOMY

module	week	type	method unit name	a teacher
1	3	<b>E/S</b>	Seminar: Circulation disorders. Recapitulation of knowledge from part of the theoretical material	
1	4	<b>L</b>	Tissue repair processes	
1	4	<b>E</b>	Pathohistological preparations of circulatory disorders	
1	4	<b>E/S</b>	Seminar: Regeneration. Repair with connective tissue. Wound healing. Recapitulation of knowledge from part of the theoretical material	
1	5	<b>L</b>	Pathology of genetically conditioned diseases. Disorders of development. Pediatric pathology	
1	5	<b>E</b>	Pathohistological preparations of degenerative and necrotic processes	
1	5	<b>E/S</b>	Seminar: Genetic diseases. Pediatric pathology. Recapitulation of knowledge from part of the theoretical material	
1	6	<b>L</b>	Immuno pathology, transplantation and explantation. Amyloidosis	
1	6	<b>E</b>	Pathohistological preparations of degenerative and necrotic processes	

## LESSON SCHEDULE FOR PATHOLOGICAL ANATOMY

module	week	type	method unit name	a teacher
1	6	<b>E/S</b>	Seminar: Immuno pathology, transplantation and explantation. Amyloidosis Recapitulation of knowledge from part of the theoretical material	
1	7	<b>L</b>	Pathology of inflammation	
1	7	<b>E</b>	Pathohistological preparations of inflammatory processes	
1	7	<b>E/S</b>	Seminar: General characteristics of inflammation. Granulomatous inflammation. Systemic effects of inflammation. Recapitulation of knowledge from part of the theoretical material	
1	8	<b>L</b>	Pathology of inflammation	
1	8	<b>E</b>	Pathohistological preparations of inflammatory processes	
1	8	<b>E/S</b>	Seminar: General characteristics of inflammation. Granulomatous inflammation. Systemic effects of inflammation. Recapitulation of knowledge from part of the theoretical material	
1	9	<b>L</b>	Tumor pathology	
1	9	<b>E</b>	Pathohistological preparations of benign and malignant tumors	

## LESSON SCHEDULE FOR PATHOLOGICAL ANATOMY

module	week	type	method unit name	a teacher
1	9	<b>E/S</b>	Seminar: Definition and classification of tumors. Tumor evolution. Molecular mechanisms of multistage carcinogenesis- Clinical characteristics of tumors Diagnosis of tumors. Recapitulation of knowledge from part of the theoretical material.	
1	10	<b>L</b>	Tumor pathology	
1	10	<b>E</b>	Pathohistological preparations of benign and malignant tumors	
1	10	<b>E/S</b>	Seminar: Definition and classification of tumors. Tumor evolution. Molecular mechanisms of multistage carcinogenesis- Clinical characteristics of tumors Diagnosis of tumors. Recapitulation of knowledge from part of the theoretical material.	
1	11	<b>L</b>	Pathology of the cardiovascular system	
1	11	<b>E</b>	Pathohistological preparations of the cardiovascular system	
1	11	<b>E/S</b>	Seminar: Pathology of the cardiovascular system Recapitulation of knowledge from part of the theoretical material	
1	12	<b>L</b>	Pathology of the cardiovascular system	
1	12	<b>E</b>	Pathohistological preparations of the cardiovascular system	

## LESSON SCHEDULE FOR PATHOLOGICAL ANATOMY

module	week	type	method unit name	a teacher
1	12	<b>E/S</b>	Seminar: Pathology of the cardiovascular system Recapitulation of knowledge from part of the theoretical material.	
1	13	<b>L</b>	Pathology of the respiratory system	
1	13	<b>E</b>	Pathohistological preparations of the respiratory system	
1	13	<b>E/S</b>	Seminar: Pathology of the respiratory system Recapitulation of knowledge from part of the theoretical material.	
1	14	<b>L</b>	Pathology of the respiratory system	
1	14	<b>E</b>	Pathohistological preparations of the respiratory system	
1	14	<b>E/S</b>	Seminar: Pathology of the respiratory system Recapitulation of knowledge from part of the theoretical material.	
1	15	<b>L</b>	Pathology of the hematopoietic system and lymph tissue	
1	15	<b>E</b>	Pathohistological preparations of pathology of the hematopoietic system and lymphatic tissue	



## LESSON SCHEDULE FOR PATHOLOGICAL ANATOMY

module	week	type	method unit name	a teacher
1	15	<b>E/S</b>	Seminar: Pathology of the hematopoietic system and lymphatic tissue Recapitulation of knowledge from part of the theoretical material.	
1	16	<b>L</b>	Pathology of the hematopoietic system and lymph tissue	
1	16	<b>E</b>	Pathohistological preparations of pathology of the hematopoietic system and lymphatic tissue	
1	16	<b>E/S</b>	Seminar: Pathology of the hematopoietic system and lymphatic tissue Recapitulation of knowledge from part of the theoretical material.	
1	17	<b>L</b>	Pathology of the kidney and urinary system	
1	17	<b>E</b>	Pathohistological preparations of kidney pathology	
1	17	<b>E/S</b>	Seminar: Kidney pathology Pathology of the lower urinary tract Recapitulation of knowledge from part of the theoretical material.	

## LESSON SCHEDULE FOR PATHOLOGICAL ANATOMY

module	week	type	method unit name	a teacher
1	18	L	Pathology of the kidney and urinary system	
1	18	E	Pathohistological preparations of kidney pathology	
1	18	E/S	Seminar: Kidney pathology Pathology of the lower urinary tract Recapitulation of knowledge from part of the theoretical material.	
1	19	L	Pathology of the gastrointestinal tract	
1	19	E	Pathohistological preparations of gastrointestinal tract pathology	
1	19	E/S	Seminar: Pathology of the gastrointestinal tract Recapitulation of knowledge from part of the theoretical material	
1	20	L	Pathology of the gastrointestinal tract	

## LESSON SCHEDULE FOR PATHOLOGICAL ANATOMY

module	week	type	method unit name	a teacher
1	20	<b>E</b>	Pathohistological preparations of gastrointestinal tract pathology	
1	20	<b>E/S</b>	Seminar: Pathology of the gastrointestinal tract Recapitulation of knowledge from part of the theoretical material	
1	21	<b>L</b>	Hepatobiliary system pathology	
1	21	<b>E</b>	Pathohistological preparations of pathology of the hepatobiliary system	
1	21	<b>E/S</b>	Seminar: Pathology of the hepatobiliary tract and pancreas. Recapitulation of knowledge from part of the theoretical material.	
1	22	<b>L</b>	Hepatobiliary system pathology	
1	22	<b>E</b>	Pathohistological preparations of pathology of the hepatobiliary system	

## LESSON SCHEDULE FOR PATHOLOGICAL ANATOMY

module	week	type	method unit name	a teacher
1	22	<b>E/S</b>	Seminar: Pathology of the hepatobiliary tract and pancreas. Recapitulation of knowledge from part of the theoretical material.	
1	23	<b>L</b>	Pathology of the endocrine system and breast	
1	23	<b>E</b>	Pathohistological preparations of endocrine system and breast pathology	
1	23	<b>E/S</b>	Seminar: Pathology of the endocrine system and the breast. Recapitulation of knowledge from part of the theoretical material.	
1	24	<b>L</b>	Pathology of the endocrine system and breast	
1	24	<b>E</b>	Pathohistological preparations of endocrine system and breast pathology	
1	24	<b>E/S</b>	Seminar: Pathology of the endocrine system and the breast. Recapitulation of knowledge from part of the theoretical material.	

## LESSON SCHEDULE FOR PATHOLOGICAL ANATOMY

module	week	type	method unit name	a teacher
1	25	L	Pathology of the male and female genital system	
1	25	E	Pathohistological preparations of the pathology of the female and male genital system	
1	25	E/S	Seminar: Pathology of the female genital system. Pathology of the male genital system. Recapitulation of knowledge from part of the theoretical material	
1	26	L	Pathology of the male and female genital system	
1	26	E	Pathohistological preparations of the pathology of the female and male genital system	
1	26	E/S	Seminar: Pathology of the female genital system. Pathology of the male genital system. Recapitulation of knowledge from part of the theoretical material	
1	27	L	Pathology of the central and peripheral nervous system	

## LESSON SCHEDULE FOR PATHOLOGICAL ANATOMY

module	week	type	method unit name	a teacher
1	27	<b>E</b>	Pathohistological preparations of pathology of the central nervous system	
1	27	<b>E/S</b>	Seminar: Pathology of the central nervous system. Recapitulation of knowledge from part of the theoretical material.	
1	28	<b>L</b>	Pathology of the central and peripheral nervous system	
1	28	<b>E</b>	Pathohistological preparations of pathology of the central nervous system	
1	28	<b>E/S</b>	Seminar: Pathology of the central nervous system. Recapitulation of knowledge from part of the theoretical material.	
1	29	<b>L</b>	Skin pathology. Soft tissue pathology. Pathology of the bone and joint system	
1	29	<b>E</b>	Pathohistological preparations of skin pathology	

## LESSON SCHEDULE FOR PATHOLOGICAL ANATOMY

module	week	type	method unit name	a teacher
1	29	<b>E/S</b>	Seminar: Pathology of the skin. Pathology of bones, joints Tumors of soft tissues Recapitulation of knowledge from the theoretical part materials	
1	30	<b>L</b>	Skin pathology. Soft tissue pathology. Pathology of the bone and joint system	
1	30	<b>E</b>	Pathohistological preparations of skin pathology	
1	30	<b>E/S</b>	Seminar: Pathology of the skin. Pathology of bones, joints Tumors of soft tissues Recapitulation of knowledge from the theoretical part materials	
			<b>FINAL EXAM (EXAMINATION PERIOD JUNE- JULY)</b>	