

MINISTRY OF HEALTH & EDUCATION OF KYRGYZ REPUBLIC
OSH STATE UNIVERSITY
INTERNATIONAL MEDICAL FACULTY
DEPARTMENT OF SURGICAL DISEASES & TRAUMATOLOGY

«**CONFIRMED**» _____
In meeting of Surgery department
Protocol.№ ____ from ____ 2024.
HOD.Assoc.Prof.
KURBANBAEV O.

«**AGREED**» _____
Chairman of SMC IMF
BAZIEVA A.

STUDENT TRAINING PROGRAM

(Syallabus)

For subject «**SURGICAL DISEASES**»

For specialist -**MEDICINE**

Study form - **morning**

course – IV

semester – VII,

Сетка часов по учебному плану

discipline	Total hours					wos	Examinations
	Total 3 credits	Auditorial					
		Aud.	Lectures	Practical	lab.		
Surgical diseases	90	36	14	22	-	54	VII
XII	90	36	14	22	-	54	Exam

Form of study: full-time

Total credits: 3, course - 4, semester - 7.

Total labor intensity: 72 hours, including: classroom - 90 hours (lectures - 14 hours, practical - 22 hours);
IWS - 54 hours.

The number of midterm controls (RC): module –1, exemptions –1 semester.

Information about the teacher: Kurmanaliev Nurlanbek

Department, room number: "Surgical disciplines with a course of traumatology", street: Monueva 5,
4 floor, 405 room.

Contact information: working hours - 8.00.-17.00, mobile phone: 0555911340, email address:
bc_kurmanaliev@mail.ru

Date: 2024-2025 academic year

OSH-2024

1. OBJECTIVES OF THE DISCIPLINE

The purpose of studying faculty surgery by IV-year students is to teach students the ability to diagnose surgical diseases, determine the choice of their treatment and prevention method.

2. LEARNING OUTCOMES OF THE DISCIPLINE

As a result of studying the course of surgical diseases, students should:

Know:

- Etiology and pathogenesis of surgical diseases;
- Clinic, course, complications, and prognosis during surgical interventions;
- Modern methods of clinical, laboratory and instrumental studies;
- Modern principles of conservative and intensive care;
- Management of preoperative, during and postoperative periods.

Be able to:

- Collect anamnesis from the patient (or relatives);
- Conduct a physical examination of the patient;
- Determine the type and scope of clinical, laboratory and instrumental research methods;
- Perform palpation, percussion and auscultation of patients»;
- Make a plan for emergency medical care and further intensive care;
- Establish the most trusting relationship with the patient, his relatives and medical professionals;
- Work as a team.

Own

- Conducting an initial examination of patients.
- Providing primary care.
- Performing some of the types of surgical interventions.
- Withdrawal of patients from terminal states

3. Prerequisites: anatomy, physiology, histology, normal and pathological physiology, pathological anatomy, pharmacology, first aid, general patient care.

4. Post-requirements: hospital surgery, pediatric surgery, traumatology, obstetrics and gynecology, oncology.

5. Technological map of the discipline(on the example of one semester)

Всего	Ауд. часы	СРС	1-модуль (75 ч., 30 б.)				2-модуль (75 ч., 30 б.)				Итог. контроль (40 б.)				Итоговый балл
			Ауд. часы		СРС	1-рубежный контроль (РК1)	Ауд. часы		СРС	2-рубежный контроль (РК2)	Лекция	Практик.	СРС	Итоговый контроль (ИК)	
			Лекция	Практик.			Лекция	Практик.							
150	75	75	14	23	38		16	22	37						
Баллы			30	30	30	30 б.	30	30	30	30 б.	40	40	40	40 б	
Виды контроля			ТК=(Лек+Прак+СРС)/3, М1=(ТК1+...+ТКN+РК1)/(N+1)				ТК=(Лек+Прак+СРС)/3, М1=(ТК1+...+ТКN+РК1)/(N+1)				ИК=(Лек+Прак+СРС)/3, Экз=М1+М2+ИК				100

Note: Ауд. - classroom, TK-current control, PK-boundary control, M-module, СРС- independent work of students, the ИК-total control.

6. Map of the accumulation of points in the discipline(for example, one module)

	TK						module	exam
	Lecture		Practice		SW			
Topics	ч	б	ч	б	ч	б	60	40
Topic-1	2	60	3	60	6	60		
Topic -2	2	60	3	60	6	60		
Topic -3	2	60	3	60	6	60		
Topic -4	2	60	3	60	6	60		
Topic -5	2	60	2	60	6	60		
Topic -6	2	60	2	60	6	60		
Topic -7	2	60	2	60	6	60		
Topic -8		60	2	60	6	60		
Topic -9		60	2	60	6	60		
Total	14	60	22	60	54	60	Result 60	Total 100

Student assessment criteria.

lecture - 60 points
 practice –60 points
 SW – 60 points

} for 1 practical lesson.

Type of lesson:	Visit	discuss	concekt	Oral Survey	Tests	Slides		referat		patient's history	Total
						Оф.	код	Оф.	код		
lecture	60	60	60								60
practice	5	15	10	20	10						60
SW						15	15	15	15		60

7. Brief content of the discipline " Surgical diseases»

Topic No.1: Thyroid diseases. Endemic goiter. Thyrotoxicosis. Basedow's disease.

Diseases of the thyroid gland, Anatomy and physiology of the thyroid gland. Correctly assess the symptoms of thyroid dysfunction. Various forms of thyrotoxic goiter with dysfunction of the cardiovascular, nervous, endocrine and other systems. Principles of treatment of various forms of goiter.

Topic: No. 2 Heart surgery is a general characteristic of acquired heart defects (stenosis and regurgitation). Surgical treatment. Congenital heart defects. Eisenmenger complex, tricuspid valve atresia, aortic coarctation, transposition of blood vessels. Congenital heart defects. Tetrad, triad, pentad of Fallot.

Acquired heart diseases, etiology and pathogenesis, classification of acquired heart defects. How to distinguish the symptoms of impaired heart function. Classification of various forms of cardiovascular diseases. Clinical features, diagnosis and treatment. Anatomy and function of the heart, emerging symptoms of impaired heart function. Special methods of research of cardiovascular diseases. Congenital heart defects. Classification of congenital heart defects. Classification of various forms of cardiovascular diseases.

Topic: No. 3 Atherosclerosis. Obliterating thrombangiitis, Raynaud's disease. Thrombosis and embolism of the arteries. Pulmonary embolism.

Anatomy and physiology of the arteries of the lower extremities, innervation of the arteries. To analyze the various clinical forms of endarteritis obliterating thrombangiitis and atherosclerosis of the arteries of the lower extremities. Etiology and pathogenesis. Clinical picture. Diagnostics

- clinical research methods. Thrombosis and embolism of arteries, etiology and pathogenesis, clinical manifestations, symptoms of thromboembolism of mesentery vessels, pulmonary artery, aortic bifurcations, arteries. Pulmonary embolism. Clinical picture of pulmonary embolism. Diagnosis of pulmonary embolism - X-ray, ECG by radioisotope perfusion light scanning, emergency angiography.

Topic:No. 4 Diseases of the veins. Varicose veins of the lower extremities.

Anatomy and physiology of the veins of the lower extremities. Features of the lower extremities, etiopathogenesis, clinic, various complications. Methods of instrumental studies of the veins of the lower extremities - phlebomanometry, phlebography, skin thermometry, & arteriography.

Clinical features, diagnosis and treatment of varicose veins of the lower extremities.

Topic:No. 5 Purulent mediastinitis.

Surgical anatomy of the mediastinum. Topography of the anterior mediastinum - thymus, brachiocephalic and superior vena cava, aorta, pulmonary artery and vein, diaphragmatic nerve, trachea, bronchi, lymph nodes. Etiopathogenesis, classification of symptoms of purulent mediastinitis. Acute mediastinitis, causes, clinical diagnosis. Surgical tactics for acute mediastinitis- anterior, posterior and diffuse mediastinitis. Diagnosis and treatment.

Topic:No. 6 Lung diseases. Acute and chronic lung abscess. Lung gangrene.

Surgical anatomy and segmental structure of the lungs. Clinical physiology of the lungs.

Definition of lung abscess and gangrene. Clinical picture of lung abscess and gangrene.

Classification of acute infectious lung destructions. Etiology and pathogenesis. Diagnosis and treatment.

Topic:No. 7 Bronchiectasis. Echinococcosis of the lungs.

Etiology of bronchiectasis and echinococcosis of the lungs. Definition bronchiectasia etiology, pathogenesis and pathological anatomy. Clinic of bronchiectasis. Echinococcosis of the lungs, etiology and pathogenesis. Clinical picture of echinococcosis of the lungs, asymptomatic stage, at the stage of clinical manifestations, the stage of complications of echinococcosis. Diagnosis and treatment

Topic:No. 8 Diseases of the esophagus. Diseases of mammary glands.

Study of etiopathogenesis of esophageal diseases, Surgical anatomy of the esophagus, esophageal segments, blood supply, innervation. Burns of the esophagus, classification, etiology, pathogenesis, clinic, diagnosis and treatment. First aid for burns of the esophagus. Complications of esophageal burns. Classification, clinical picture, diagnosis and treatment.

Topic:No. 9 Anatomy of the abdominal wall - boundaries, layers, blood supply, innervation, lymphatic flow.

Etiopathogenesis, clinic, treatment and prevention of hernias. Classification of abdominal hernia.

General principles of treatment of abdominal hernia - surgical treatment, fascial-aponeurotic plastic muscle plastic, plastic with additional biological or synthetic materials. Surgical anatomy of inguinal hernia, anatomical and physiological conditions of their occurrence. Classification definitions, etiology and pathogenesis Oblique inguinal hernia, embryonic development of the inguinal region, the process of testicular prolapse. Surgical treatment of inguinal hernia, a method of local anesthesia. Diagnosis and treatment. Complications.

8. THEMATIC PLAN FOR THE DISTRIBUTION OF HOURS BY TYPE OF ACTIVITY
Calendar and thematic plan of lectures
for students majoring in 560001-Medical Science (GM)
(7th semester, 2024-2025 academic year.)

№ недели	№ заня тия	Name of sections, modules, and topics	Кол-во часов	
По учебному плану	1.	Diseases of thyroid gland.	2 h.	18 часов
	2.	Atherosclerosis. Obliteransthrombanginitis Raynaud's disease. Thrombosis & emboli of vessels. Pulmonary embolism.	2 h.	
	3.	Diseases of veins.Varicose veins. Thrombosis of deep veins of lower limbs.	2 h.	
	4.	Surgical anatomy of mediastinium.Mediastinitis.	2 h.	
	5.	Diseases of mammary glands.(etiopathogenesis , clinic, treatment).	2 h.	
	6.	Diseases of esophaguscongenital,burn,achlasia, GERD, cancer.	2 h.	
	7.	Hernia. Clinical classification. General characteristics Inguinal & femoral hernia.	2 h.	
	Module : « Surgical diseases II »		2 h..	

Calendar and thematic plan of practical classes
for students majoring in 560001-Medical Science (GM)
(7th semester, 2024-2025 academic year.)

№ недели	№ зан	Name of sections, modules, and topics	Кол-во часов
1 week	1.	Diseases of thyroid gland.Endemic goiter. Thyrotoxicosis. Graves disease	3 h.
2 week	2.	Heart surgery – general characteristics Acquired heart diseases. Surgical treatment.Congenital heart diseases. Eisenmenger complex, tricuspid atresia, PDA, coarctation of the aorta, transposition of blood vessels. Tetrad, triad,pentad of Fallot, ASD & VSD.	3 h.
3 week	3.	Atherosclerosis. Obliteransthrombanginitis Raynaud's disease. Thrombosis& emboli of vessels. Pulmonary embolism.	3 h.
4 week	4.	Diseases of veins.Varicose veins. Thrombosis of deep veins of lower limbs.	3 h.
5 week	5.	Surgical anatomy of thorax region.physiology of lungs&pleura. Surgical anatomy of mediastinium. Mediastinitis.	2 h.
6 week	6.	Acute& chronic abscess of lungs. Gangrene of lungs. Complications. Pleural effusion. Empyema of lungs.	2 h.

7 week	7.	Bronchoectasis. Echinococci of lungs.	2 h.
8 week	8.	Diseases of esophagus congenital, burn, achlasia, cancer. Diseases of mammary glands. (etiopathogenesis? clinic, treatment).	2 h.
9 week	9.	Hernia. Clinical classification. General characteristics Inguinal & femoral hernia.	2 h.
		1ST MODULE: SURGICAL DISEASES	2 h.
Total hours	Lecture classes		14 hours
	Practical exercises		22 hours
	Modules		2 hours

**Program of independent work
(2024-2025 academic year.)**

1. Preoperative preparation and postoperative management of surgical patients. Clinical anatomy of the abdomen.
2. Endemic goiter – definition, distribution sites, classification, etiopathogenesis, clinic, prevention and treatment
3. Thyroiditis, strumitis – definition, clinic, complications, types of chronic thyroiditis (Riedel's goiter, Hashimoto's goiter), treatment
4. Thyrotoxicosis – etiopathogenesis, clinic and treatment
5. Surgical treatment of endemic goiter and thyrotoxicosis
6. Complications during and after surgery
7. Hypothyroidism and myxedema – etiopathogenesis, clinic, dif/diagnosis, treatment
8. Dysthyroidism – definition, clinic and treatment
9. Anatomy and function of the heart
10. Diagnosis of heart diseases.
11. Classification of heart defects.
12. Mitral stenosis and mitral valve insufficiency – clinic, diagnosis, dif/diagnosis, indications and contraindications to surgery
13. preoperative preparation of patients
14. Methods of surgery – closed and open methods, commissurotomy and prosthetics of heart valves.
15. Aortic coarctation
16. Lutembache disease (definition of the concept, etiopathogenesis (the role of lipid-cholesterol metabolism disorders, increased blood pressure, mechanical and allergic factors in the origin of the disease).
17. Topographic anatomy of the arteries of the lower limb, their structure
18. Diagnostic methods (clinical, functional, special)
19. Congenital defects of blood vessels (aortic coarctation, congenital tortuosity of the aortic arch, arteriovenous fistulas).
20. Clinical forms of obliterating atherosclerosis (occlusion of the branches of the aortic arch, occlusion of the trunks of the abdominal aorta – the so-called abdominal angina, atherosclerotic lesion of the renal arteries, Leriche syndrome, occlusion of the femoral and popliteal arteries).
21. Nonspecific aortoarteritis (etiology, pathogenesis, clinic, diagnosis and differential diagnosis, treatment and prevention).
22. Obliterating thrombangiitis (etiology, pathogenesis, clinic, diagnosis and differential diagnosis, treatment and prevention).

23. Raynaud's disease and syndrome (etiology, pathogenesis, clinic, diagnosis and differential diagnosis, treatment and prevention).
24. Diagnosis of vascular diseases (the value of rheovasography, angiography, thermometry, etc.).
25. Differential diagnosis of vascular diseases.
26. Indications for surgical treatment.
27. Methods of operations: endarterectomy, resection of arteries with subsequent prosthetics.
28. Prevention of vascular diseases.
29. Chronic lung abscess – clinic, diagnosis, complications, diff/diagnosis, treatment.
30. Lung gangrene – etiopathogenesis, clinic, complications, diagnosis, dif / diagnosis and treatment.

9. EDUCATIONAL AND METHODOLOGICAL SUPPORT OF THE COURSE

наименование	автор	год выпу ска	адрес
1. Principles & Practice of A Davidson Title 6th Edition Surgery	O. James Garden, Andrew W. Bradbury, John L.R. Forsythe, Rowan W. Parks	2012	https://ibooks.oshsu.kg/book/?lg=1&id_parent=376&id1=1885&id4=2.2.81.1#books01920
2. Oxford Handbook of Operative Surgery	Anil Agarwal, Neil Borley, Greg McLatchie	2017	https://ibooks.oshsu.kg/book/?lg=1&id_parent=376&id1=1884&id4=2.2.81.1#books01918
3. Bailey Love's Short Practice of Surgery	Henry Hamilton Bailey, Robert J. McNeill Love	2018	https://ibooks.oshsu.kg/book/?lg=1&id_parent=376&id1=1883&id4=2.2.81.1#books01919
4. Surgical Care at the District Hospital	Jean C. Emmanuel	2000	https://ibooks.oshsu.kg/book/?lg=1&id_parent=376&id1=1886&id4=2.2.81.1#books01921
5. Manipal manual of Surgery 4th edition	Rajagopal Shenoy, Anitha Shenoy	2014	https://ibooks.oshsu.kg/book/?lg=1&id_parent=376&id1=285&id4=#books00282

Software and Internet resources:

1. MedLine – [http:// www.medline](http://www.medline) – catalog.ru
2. ScientificNefworh - <http://nature.web.ru>
3. Медицински книги - <http://www.medicbooks.info>

10. INFORMATION ON THE ASSESSMENT (TABLE POINTS)

100 бальная система	30 бальная система	Оценка по буквенной системе	Цифровой эквивалент оценки	Оценка по традиционной системе
87 – 100	26 – 30	A	4,0	Great
80 – 86	24 – 25	B	3,33	Well
74 – 79	22 – 23	C	3,0	
68 -73	20 – 21	D	2,33	
61 – 67	18 – 19	E	2,0	Satisfactory
31-60	9 – 17	FX	0	Unsatisfactory
0-30	0 – 8	X	0	

11. SCORING POLICY

In accordance with the points accumulation card, the student can receive points for all types of classes. At lectures, in practical classes, and for performing the SRS. At the same time, for the current and boundary controls-a maximum of 60 points for 1 module; the final control – a maximum of 40.

12. COURSE POLICY

The policy of the discipline is aimed at the most complete mastering of the educational material by students and the fruitful cooperation of teachers and students

Students are required to:

- Fully master the knowledge, skills and practical skills;
- Respectfully and correctly treat teachers, employees and students;
- Students should be disciplined and neat, behave with dignity at the University, in hospitals.
- With the beginning of classes in all educational and adjacent premises must be provided with the silence and order necessary for the normal course of training sessions;
- Students are allowed to enter the classroom and leave the classroom after the start of classes (the actual start of classes by the teacher) only with the permission of the teacher;
- Be sure to attend lectures, practical (seminar, laboratory) classes, classes on SW;
- Attend practical (seminar, laboratory) classes, exams in medical form;
- Have medical records in clinical departments with admission from the sanitary inspection station.
- Take care of the property of the department;
- Comply with fire safety regulations
- Comply with the academy's internal regulations
- Actively participate in the life of the department (participate in the student scientific circle, events of the department, etc.).
- Turn off mobile phones during lectures, classes; it is forbidden to take cell phones for exams.
- Attending lectures is mandatory. In case of missing lectures, the material is worked out in the form of preparing a lecture summary and an interview with the lecturer.
- Working out at departments and courses should be carried out outside of school hours – on Saturdays, in the clinic-it is allowed to conduct working out during the night duty of the teaching staff.
- The student is obliged to work out the lesson in the number of missed hours according to the program.
- In case of missing classes by students for a valid reason (being on inpatient treatment, the occurrence of emergency events: natural disasters, accidents, etc.), the student or his relatives are obliged to inform the department about the incident in any way (by phone, etc.) within a day with the provision of documents confirming this circumstance. The exculpatory documents are: a certificate from the student polyclinic, a certificate of the death of loved ones, a donor certificate, a marriage certificate, a child's birth certificate. In the absence of supporting documents, the reason is considered disrespectful.

13. LIST OF QUESTIONS AND TASKS ON TOPICS AND FORMS OF CONTROL

Questions of final control

1. Anatomy and function of the thyroid gland
2. Classification of thyroid diseases
3. Methods of examination of patients with thyroid pathology
4. Endemic goiter – definition, distribution sites, classification, etiopathogenesis, clinic, prevention and treatment
5. Thyroiditis, strumitis – definition, clinic, complications, types of chronic thyroiditis (Riedel's goiter, Hashimoto's goiter), treatment
6. Thyrotoxicosis – etiopathogenesis, clinic and treatment
7. Surgical treatment of endemic goiter and thyrotoxicosis
8. Complications during and after surgery

9. Hypothyroidism and myxedema – etiopathogenesis, clinic, dif/diagnosis, treatment
10. Dysthyroidism – definition, clinic and treatment
11. .Anatomy and function of the heart
12. Diagnosis of heart diseases.
13. Classification of heart defects.
14. Mitral stenosis and mitral valve insufficiency – clinic, diagnosis, dif/diagnosis, indications and contraindications to surgery
15. preoperative preparation of patients
16. Methods of surgery – closed and open methods, commissurotomy and prosthetics of heart valves
17. The Fallot Triad
18. TetradaFallo
19. PentadaFallo
20. The Eisenmenger Complex
21. Common arterial trunk
22. Tricuspid valve atresia and non-functioning right ventricle
23. Transposition of vessels
24. Nezarasheniebotallova duct
25. Aortic coarctation
26. Lutembache disease (definition of the concept, etiopathogenesis (the role of lipid-cholesterol metabolism disorders, increased blood pressure, mechanical and allergic factors in the origin of the disease).
27. Topographic anatomy of the arteries of the lower limb, their structure
28. Diagnostic methods (clinical, functional, special)
29. Congenital defects of blood vessels (aortic coarctation, congenital tortuosity of the aortic arch, arteriovenous fistulas).
30. Clinical forms of obliterating atherosclerosis (occlusion of the branches of the aortic arch, occlusion of the trunks of the abdominal aorta – the so-called abdominal angina, atherosclerotic lesion of the renal arteries, Lerish syndrome, occlusion of the femoral and popliteal arteries).
31. Nonspecific aortoarteritis (etiology, pathogenesis, clinic, diagnosis and differential diagnosis, treatment and prevention).
32. Obliterating thrombangiitis (etiology, pathogenesis, clinic, diagnosis and differential diagnosis, treatment and prevention).
33. Raynaud's disease and syndrome (etiology, pathogenesis, clinic, diagnosis and differential diagnosis, treatment and prevention).
34. Diagnosis of vascular diseases (the value of rheovasography, angiography, thermometry, etc.).
35. Differential diagnosis of vascular diseases.
36. Indications for surgical treatment.
37. Methods of operations: endarterectomy, resection of arteries with subsequent prosthetics.
38. Prevention of vascular diseases.
39. Anatomy, topography, physiology of the venous system.
40. Varicose veins of the lower extremity (definition, etiology and pathogenesis).
41. Classification and clinic of varicose veins of the lower extremities.
42. Complications of varicose veins of the lower extremities.
43. Treatment of varicose veins of the lower extremities. Types of operations.
44. Postthrombophlebitic syndrome (etiology, pathogenesis, clinic, diagnosis and differential diagnosis, treatment and prevention).
45. Chronic venous insufficiency (definition, etiology, pathogenesis, clinic, diagnosis, treatment and prevention).
46. Phlebothrombosis and thrombophlebitis (definition, etiology, pathogenesis, clinic, diagnosis, treatment and prevention).

47. Thrombosis and embolism of vessels (definition, etiology, pathogenesis, clinic, diagnosis, emergency surgical care).
48. Thrombosis and embolism of mesenteric vessels (intestinal blood supply, types of disorders of normal blood flow) – clinic (periods), clinical forms, atypical forms, diagnosis, treatment (anticoagulant and surgical)
49. Pulmonary embolism – frequency, clinic and treatment
50. Acute arterial thrombosis – degrees and treatment
51. Aortic bifurcation embolism – etiopathogenesis, clinic and treatment
52. Risk factors and prevention of thromboembolic complications.
53. Anatomy, topography and physiology of the lungs and pleura.
54. Basic, additional diagnostic methods, diagnostic operations on the chest.
55. Assessment of the physiological operability of patients, the function of external respiration, blood circulation, water-electrolyte balance, nutrition, protein metabolism, hemostasis in diseases of the chest. Endogenous intoxication and functional operability. Age and functional operability.
56. Acute lung abscess (etiopathogenesis, clinic, complications, diagnosis, diff/diagnosis and treatment).
57. Lung gangrene – etiopathogenesis, clinic, complications, diagnosis, dif / diagnosis and treatment.
58. Chronic lung abscess – clinic, diagnosis, complications, diff/diagnosis, treatment.
59. Actinomycosis of the lungs (clinic, diagnosis, complications, diff / diagnosis, treatment).
60. Anomalies of lung development.
61. Empyema of the pleura – definition, etiopathogenesis, classification, clinic, diagnosis, dif / diagnosis, treatment (operative and conservative).
62. Chronic empyema of the pleura – etiopathogenesis, clinic, diagnosis, treatment.
63. Bronchial fistulas (clinic, diagnosis, treatment).
64. Spontaneous pneumothorax – definition, etiopathogenesis, clinic, complications and treatment.
65. Bronchiectatic disease – definition, etiopathogenesis, clinic, complications, diagnosis, dif / diagnosis and treatment.
66. Pulmonary cysts – etiopathogenesis, classification, clinic, complications, diagnosis and treatment
67. Echinococcus of the lungs – etiopathogenesis, clinic, diagnosis, treatment.
68. Anatomy, topography and physiology of the mammary gland.
69. Breast diseases (classification, diagnosis, complications).
70. Purulent mastitis (etiology, pathogenesis, classification, clinic, complications, diagnosis, diff/diagnosis, treatment).
71. Congenital diseases and dysghormonal hyperplasia of the breast.
72. Mediastinum – definition, anatomy, topography.
73. Anatomy, topography of the diaphragmatic nerve, vagus nerve, thoracic lymphatic duct, unpaired and semi-paired veins, borderline sympathetic trunk.
74. Mediastinitis – definition, classification, etiology, pathogenesis, diagnosis, clinic and treatment.
75. Topographic anatomy, physiology of the esophagus.
76. Foreign bodies and esophageal trauma.
77. Achalasiacardia (etiology, pathogenesis, classification, clinic, complications, diagnosis, diff/diagnosis, treatment).
78. Achalasiacardia (etiology, pathogenesis, classification, clinic, complications, diagnosis, diff/diagnosis, treatment).
79. Reflux esophagitis (peptic esophagitis) - (etiology, pathogenesis, classification, clinic, complications, diagnosis, diff/diagnosis, treatment).
80. Esophageal diverticula (etiology, pathogenesis, classification, clinic, complications, diagnosis, diff/diagnosis, treatment).
81. Burns (thermal, chemical) of the esophagus (etiology, pathogenesis, clinic, complications and treatment).
82. Burn strictures of the esophagus, surgical treatment.

- 83. Esophageal cancer – statistics, etiopathogenesis, pathomorphology, classification
- 84. Clinic, diagnosis of esophageal cancer
- 85. Endoscopic semiotics of esophageal cancer
- 86. Treatment and prevention of esophageal cancer.
- 87. Esophageal sarcoma.