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Информация о владельце:

ФИО: Косенок Сергей Михайлович

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Khanty-Mansiysk Autonomous Okrug-Yugra

"Surgut State University"

Уникальный программный ключ:

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Approved by
Deputy Rector for Academic
Affairs
E.V. Konovalova
"11" June 2025, Record No. 5

# **Oncology, radiation therapy**Syllabus

Department Surgical diseases

Curriculum s310501-ЛечДелоИн -25-6.plx

Specialty 31.05.01 General Medicine

Qualification General Practitioner

Form of education Full-time

Total (in credits) 3

Total academic hours 108 Control:

including: Credit 12 term

Contact 80

Self-study 28

### Course outline in terms

Academic year (Term)	12 (6.2)		Total	
Weeks	16 5/6			
Type of classes	Cur	Syl	Cur	Syl
Lectures	16	16	16	16
Practical	64	64	64	64
Contact work	80	80	80	80
Self-study	28	28	28	28
Total	108	108	108	108

The Syllabus is compiled by:  Doctor of Medical Sciences, Professor, Parsadanyan A. M
The Syllabus
Oncology, radiation therapy
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 Russian Federation on February, 9, 2016, No. 95)
Based on the Curriculum:
31.05.01 GENERAL MEDICINE Specialization: General Medicine Approved by the Academic Council of Surgut State University, "11" 06 2025, Record No. 5

The Syllabus was approved by the department **Surgical diseases** 

Head of the Department, Doctor of Medical Sciences, Professor Darwin V.V.

### 1. COURSE OBJECTIVES

1.1 The aim of the course "Oncology, radiation therapy" is to acquire knowledge about the etiology, pathogenesis and early diagnosis of oncological diseases, as well as tactics for the treatment and prevention of tumor diseases and the formation of clinical thinking and professional competencies necessary within the framework of professional activities.

	2. COURSE OVERVIEW
Course code (in curriculum)	B1.B
2.1 Assumed background:	
2.1.1 Hospital surgery, pediat	ric surgery
2.1.2 Pathophysiological base	s of emergency conditions in the clinic of internal diseases
2.1.3 Pathological anatomy, c	linical pathological anatomy
2.1.4 Pharmacology	
2.2 Post requisite courses :	and practice:
2.2.1 Preparation for and pass	ing the state exam
2.2.2 Outpatient therapy	
2.2.3 Instrumental research m	ethods
2.2.4 Clinical surgery	

# 3. COMPETENCES UPON COMPLETION OF THE COURSE (MODULE)

PC-1: Demonstrates ability to think abstractly, to analyze, and to synthesize

GPC-9: Demonstrates ability to assess morphological and functional states, physiological states, and pathological processes in the human body for clinical decision-making.

PC-5: Demonstrates readiness to collect and analyze patient complaints, medical history, examination results, and findings from laboratory, instrumental, histopathological, and other studies to establish a diagnosis.

PC-6: Demonstrates ability to identify a patient's key symptoms, disease syndromes, and underlying diseases in accordance with ICD-10.

PC-8: Demonstrates ability to develop clinical management strategies for patients with various nosological forms.

## By the end of the course students must:

3.1	Know:
3.1.1	- the main signs of oncological diseases (their etiology, pathogenesis, diagnostic criteria (clinical - subjective, physical,
	laboratory, instrumental);
3.1.2	- modern clinical classifications and diagnostic criteria for diagnosing cancer, principles for establishing the stage of the
	disease;
3.1.3	- the scope of diagnostic measures carried out when there is a suspicion of cancer in order to clarify the diagnosis;
3.1.4	- tactics for conducting differential diagnosis of the most common pathologies with clinically similar diseases;

- 3.1.5 treatment tactics for various categories of patients with diseases in outpatient settings, in hospitals and high-tech medical care (HTMC) centers using drugs, medical devices and therapeutic nutrition, taking into account the clinical picture, in accordance with current procedures, standards for the provision of medical care, clinical recommendations (treatment protocols);
- 3.1.6 regulatory acts in compliance with laws on confidential information for the purpose of psychological adaptation in society after treatment;
- 3.1.7 tactics of primary and secondary prevention of oncological diseases.
  - 3.2 Be able to:
- 3.2.1 analyze the patterns of the course of the pathological process of the disease, using fundamental knowledge, think clinically;
- 3.2.2 create diagnostic and tactical algorithms, be able to analyze clinical symptoms of diseases, conduct differential diagnosis, determine treatment tactics (taking into account the side effects of drugs, methods of their administration, knowledge of the duration of their use and assess the effectiveness and safety of the drug therapy, therapeutic nutrition and the use of non-drug treatment, therapeutic nutrition of palliative medical care);
- 3.2.3 analyze the psychological state of patients;
- 3.2.4 build relationships with the patient and relatives aimed at creating the most favorable psychological comfort for the most successful treatment;
- 3.2.5 apply knowledge of regulatory acts in compliance with laws on confidential information for the purpose of psychological adaptation in society after treatment;
- 3.2.6 collect anamnesis, analyze the nature of complaints (organ dysfunction, pain syndrome, pathological discharge, changes in general condition, etc.), conduct a physical examination of the cancer patient;
- 3.2.7 make a plan for clinical and instrumental examination of suspected malignant tumors, formulate and justify a clinical diagnosis, form a group of people at increased risk of developing a malignant tumor, conduct an analysis of the reasons for late diagnosis of cancer;
- 3.2.8 conduct preventive measures with the population to prevent oncological diseases;
- 3.2.9 analyze the patterns of functioning of various organs and systems in various diseases and pathological processes, using the algorithm for making a diagnosis (primary, concomitant, complications) in accordance with the International Statistical Classification of Diseases and Related Health Problems, 10th 11th revisions and current clinical classifications.

4. STRUCTURE AND CONTENTS OF THE COURSE (MODULE) Class Topics/Class type Term / Academic | Competence | Literature Notes Code Academic year Section 1. Term 12. 1.1 Modern problems of oncology. 12 PC-1 GPC-9 L1.1 L1.2 Organization of oncological service in PC-5 PC-6 L1.3L2.3 Russia. Malignant tumors. Pathogenesis of PC-8 L2.5 L2.6 clinical symptoms. E1 E2 E3 Principles of diagnostics and treatment. E4 E5 E6 /Lec/ 1.2 Modern problems of oncology. PC-1 GPC-9 L1.1 L1.2 12 4 PC-5 PC-6 Organization of oncological service in L1.3L2.3 Russia. Malignant tumors. /Pr/ PC-8 L2.5 L2.6 E1 E2 E3 E4 E5 E6

1.3	Pathogenesis of clinical symptoms. Principles of diagnostics and treatment /Pr/	12	4	PC-1 GPC-9 PC-5 PC-6 PC-8 L1.3L2.3 L2.5 L2.6 E1 E2 E3 E4
				E5 E6
1.4	General principles of diagnostics and	12	4	PC-1 GPC-9 L1.1 L1.2
1.4	treatment in oncology. "Alarm signals"	12	7	PC-1 GPC-9 PC-5 PC-6 PC-8 L1.3L2.3 L2.5 L2.6
1.5		10		
1.5	Skin cancer, melanoma. Tumors of the head and neck. /Lec/	12	2	PC-5 PC-6 L1.3L2.1 L2.3
				PC-8 L2.5 L2.6L3.1 L3.2
				E1 E2 E3 E4
				E5 E6
1.6	Skin cancer, melanoma. Tumors of the	12	4	PC-1 GPC-9 L1.1 L1.2
	head and neck. /Pr/			PC-5 PC-6 L1.3L2.1 L2.3
	new and neem / 1 1/			PC-8 L2.5 L2.6
				E1 E2 E3 E4
				E5 E6
1.7	Skin cancer, melanoma. Head and neck	12	1	PC-1 GPC-9 L1.1 L1.2
	tumors. /Self-study/			PC-5 PC-6 L1.3L2.1 L2.3
	, , , , , , , , , , , , , , , , , , ,			PC-8 L2.5 L2.6
				E1 E2 E3 E4
				E5 E6
1.0				
1.8	Esophagus and stomach cancer. Colon and	12	2	PC-1 GPC-9 L1.1 L1.2
	rectal cancer. /Lec/			PC-5 PC-6 L1.3L2.3 L2.5
				PC-8 L2.6
				E1 E2 E3 E4
				E5 E6
1.9	Esophagus and stomach cancer /Pr/	12	4	PC-1 GPC-9 L1.1 L1.2
1.5	Esophagas and stomaton cancer 71 17	12	l '	PC-5 PC-6 L1.3L2.3 L2.5
				PC-8 L2.6
				E1 E2 E3 E4
				E5 E6
1.10	Esophagus and stomach cancer /Self-	12	1	PC-1 GPC-9 L1.1 L1.2
	study/			PC-5 PC-6 L1.3L2.3 L2.5
				PC-8 L2.6
				E1 E2 E3 E4
				E5 E6
1.11	Mastopathy and breast cancer. /Pr/	12	4	PC-1 GPC-9 L1.1 L1.2
1.11	Wastopathy and breast cancer. /Fi/	12	"	
				PC-5 PC-6 L1.3L2.3 L2.5
				PC-8 L2.6
				E1 E2 E3 E4
				E5 E6
1.12	Mastopathy and breast cancer. /Self-study/	12	1	PC-1 GPC-9 L1.1 L1.2
1	1		1	PC-5 PC-6 L1.3L2.3 L2.4
1				PC-8 L2.5 L2.6
1				E1 E2 E3 E4
1				E5 E6
1 12	Lyng concer /Lee/	10	1	
1.13	Lung cancer. /Lec/	12	2	PC-1 GPC-9 L1.1 L1.2
1			1	PC-5 PC-6 L1.3L2.2 L2.3
1			1	PC-8 L2.5 L2.6
1			1	E1 E2 E3 E4
				E5 E6
1.14	Lung cancer. /Pr/	12	4	PC-1 GPC-9 L1.1 L1.2
1	-			PC-5 PC-6 L1.3L2.3 L2.5
1				PC-8 L2.6
1				E1 E2 E3 E4
I			1	E5 E6
			<u> </u>	EJ EU

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1.15	Lung cancer. /Self-study/	12	1	PC-1 GPC-9 PC-5 PC-6 PC-8	L1.3L2.3 L2.5 L2.6 E1 E2 E3 E4 E5 E6	
1.16	Colon and rectal cancer. /Pr/	12	4	PC-1 GPC-9 PC-5 PC-6 PC-8	L1.1 L1.2 L1.3L2.3 L2.5 L2.6 E1 E2 E3 E4 E5 E6	
1.17	Colon and rectal cancer. /Self-study/	12	1	PC-1 GPC-9 PC-5 PC-6 PC-8	L1.1 L1.2 L1.3L2.3 L2.5 L2.6 E1 E2 E3 E4 E5 E6	
1.18	Liver and pancreatic cancer glands. /Lec/	12	2	PC-1 GPC-9 PC-5 PC-6 PC-8		
1.19	Liver and pancreatic cancer glands. /Pr/	12	4	PC-1 GPC-9 PC-5 PC-6 PC-8	L1.1 L1.2 L1.3L2.3 L2.5 L2.6 E1 E2 E3 E4 E5 E6	
1.20	Liver and pancreatic cancer glands. /Self-study/	12	1	PC-1 GPC-9 PC-5 PC-6 PC-8	L1.1 L1.2 L1.3L2.3 L2.5 L2.6 E1 E2 E3 E4 E5 E6	
1.21	Bone and soft tissue sarcomas. /Lec/	12	2	PC-1 GPC-9 PC-5 PC-6 PC-8	L1.1 L1.2 L1.3L2.3 L2.5 L2.6 E1 E2 E3 E4 E5 E6	
1.22	Sarcomas of bones and soft tissues. /Pr/	12	4	PC-1 GPC-9 PC-5 PC-6 PC-8	L1.1 L1.2 L1.3L2.3 L2.5 L2.6 E1 E2 E3 E4 E5 E6	
1.23	Sarcomas of bones and soft tissues. /Self-study/	12	1	PC-1 GPC-9 PC-5 PC-6 PC-8	L1.1 L1.2 L1.3L2.3 L2.5 L2.6 E1 E2 E3 E4 E5 E6	
1.24	Drug therapy for patients with malignant tumors. Radiation therapy of malignant tumors. Complications of radiation therapy /Lec/	12	2	PC-1 GPC-9 PC-5 PC-6 PC-8	L1.1 L1.2 L1.3L2.3 L2.5 L2.6 E1 E2 E3 E4 E5 E6	
1.25	Drug therapy for patients with malignant tumors. /Pr/	12	4	PC-1 GPC-9 PC-5 PC-6 PC-8		
1.26	Complications of drug therapy for malignant tumors. /Pr/	12	4	PC-1 GPC-9 PC-5 PC-6 PC-8	L1.1 L1.2 L1.3L2.3 L2.5 L2.6	
1.27	Drug therapy for patients with malignant tumors. /Self-study/	12	1	PC-1 GPC-9 PC-5 PC-6 PC-8	L1.1 L1.2 L1.3L2.3 L2.5 L2.6 E1 E2 E3 E4 E5 E6	

1.28	Radiation therapy of malignant tumors. Complications of radiation therapy /Pr/	12	4	PC-1 GPC-9 PC-5 PC-6 PC-8	L1.1 L1.2 L1.3L2.3 L2.5 L2.6 E1 E2 E3 E4	
					E5 E6	
1.29	Radiation therapy of malignant tumors. Complications of radiation therapy /Self-study/	12	1	PC-1 GPC-9 PC-5 PC-6 PC-8	L1.1 L1.2 L1.3L2.3 L2.5 L2.6 E1 E2 E3 E4 E5 E6	
1.30	Final lesson /Pr/	12	4	PC-1 GPC-9 PC-5 PC-6 PC-8	L1.1 L1.2 L1.3L2.3 L2.5 L2.6 E1 E2 E3 E4 E5 E6	
1.31	Final lesson. Solving situational problems /Pr/	12	2	PC-1 GPC-9 PC-5 PC-6 PC-8	L1.1 L1.2 L1.3L2.3 L2.5 L2.6	
1.32	/Control work/Control/	12	0	PC-1 GPC-9 PC-5 PC-6 PC-8	L1.1 L1.2 L1.3L2.3 L2.5 L2.6	
1.33	Credit	12	0	PC-1 GPC-9 PC-5 PC-6 PC-8		

		5. ASSESSMENT TOOLS		
		5.1. Tests and tasks		
Supplen	nent 1			
		5.2. Topics of written papers		
Supplen	nent 1			
		5.3. Assessment tools		
Supplen	nent 1			
		5.4. Assessment tools		
	ion, tests, essays. Practi			
Credit: o	oral credit, practical ski			
		6. COURSE (MODULE) RESOURCES		
		6.1. Recommended Literature		
		6.1.1. Core		
	Authors	Title	Publish., year	Quantity
L1.1	Popova T. N., Zhandarova L. F., Barsukov V. Yu., Shmyleva O. A., Samsonov D. V., Plokhova E. Yu., Dugin Yu. P., Averyanova S. V., Orlova Yu. I.	Oncology. Complete reference book	Saratov: Nauchnaya kniga, 2019, electronic resource	1
L1.2	Yanushevich O. O., Duditskaya T. K., Kalinin M. R.	Oncology: a textbook for use in the educational process of educational organizations implementing higher education programs in the specialties 31.05.01 "General Medicine", 31.05.03 "Dentistry"	Moscow: Publishing group "GEOTAR-Media", 2019, electronic resource	1
L1.3	Peterson S.B.	Oncology: textbook	Moscow: GEOTAR-Media, 2018, electronic resource	1
	<del>1</del>	6.1.2. Supplementary		_
	Authors	Title	Publish., year	Quantity

L2.1	Lamotkin I. A.	Clinical dermato-oncology	Moscow:	1
L2.1	Lamotkiii I. A.	Clinical definato-offcology	Laboratory of	1
			knowledge""	
			(formerly	
			""BINOM.	
			Laboratory of	
			knowledge", 2015,	
			electronic resource	
L2.2		Lung Cancer: A Practical Guide	Moscow:	1
			GEOTAR-Media,	
			2017, electronic	
			resource	
L2.3	Davydov M.И.,	Oncology: oculyk: textbook	Moscow:	1
	Gantsev Sh.Kh.		GEOTAR-Media,	
			2018, electronic	
			resource	
L2.4	Gancev Sh.Kh.	Breast Cancer: A Practical Guide	Moscow:	1
L2.4	Gancev Sil.Kil.	Breast Cancer. A Fractical Guide	GEOTAR-Media,	1
			2015, electronic	
			resource	
L2.5	Cherenkov V.G.	Oncology: textbook	Moscow:	1
			GEOTAR-Media,	
			2017, electronic	
			resource	
L2.6	Trufanov G.E.	Radiation Therapy (Radiotherapy): Textbook	Moscow:	1
			GEOTAR-Media,	
			2018, electronic	
			resource	
		6.1.3. Methodical development		
	Authors	Title	Publish., year	Quantity
L3.1	Parsadanyan A. M.,	Skin melanoma: methodological recommendations and	Surgut: Publishing	1
LJ.1	Murtuzalieva A. A.,	situational tasks for practical classes and tests	center of Surgut	1
	Stepanyan A. A.,	situational tasks for practical classes and tests	State University,	
	Harutyunyan L. M.		2020, electronic	
	Harutyunyan L. M.			
T 2 2	D 1 1 1		resource	
L3.2	Parsadanyan A. M.,	Thyroid cancer: guidelines and test tasks for practical classes and	Surgut: Publishing	1
	Amiragyan D. M.,	tests	center of Surgut	
	Musaeva S. D.,		State University,	
	Stepanyan A. A.		2020, electronic	
			resource	
		6.2. Internet resources		
E1	Medline			
E2	Russian medicine: artic	cles, dissertations, books		
E3	Portal of Russian scien	ntific journals (RSJ)		
E4	Central Scientific Med	•		
E5		stract and citation database		
E6	Eurasian Patent Inform	nation System (EAPATIS)		
	Eurasian Patent Inform	nation System (EAPATIS)  6.3.1 Software		
E6	Eurasian Patent Inform  1 Microsoft Operating S	6.3.1 Software		

#### 6.3.2 Information Referral systems

- 6.3.2.1 http://www.garant.ru Information and legal portal Garant.ru
- 6.3.2.2 http://www.consuitant.ru Reference and legal system Consultant Plus

# 7. MATERIAL AND TECHNICAL SUPPORT OF DISCIPLINE (MODULE)

- 7.1 A classroom for conducting lectures, practical classes, group and individual consultations, ongoing monitoring and midterm assessment No. UK-52/57 on the basis of the Khanty-Mansiysk Autonomous Okrug-Yugra State Budgetary Institution "Surgut District Clinical Hospital" is equipped with: a set of specialized educational furniture, a marker board.
- 7.2 Technical teaching aids for presenting educational information: a set of (portable) multimedia equipment laptop, projector, projection screen.
- 7.3 Amount of seats -10.
- 7.4 Software used: Microsoft Windows, Microsoft Office application package.
- 7.5 Access to the Internet and the organization's electronic information environment is provided.
- 7.7 Premises designated for providing medical care to patients, including those involving medical interventions at the BU KHMAO-Yugra "Surgut Okrug Clinical Hospital", equipped with specialized devices and/or medical equipment (sphygmomanometer, stethoscope, phonendoscope, thermometer, medical scales, stadiometer, shock kit, emergency preventive and therapeutic procedure set, electrocardiograph, bactericidal irradiator, anesthesia-respiratory machine, mechanical ventilator, infusion pump, postoperative suction unit, synchronized defibrillator, multifunctional universal surgical operating table, surgical/microsurgical instrumentation, universal wound retractor system with operating table attachment, vital signs monitor, respiratory gas analyzer, electroencephalograph, synchronized defibrillator, gastroduodenoscope, duodenoscope (side-viewing), pediatric colonoscope, pediatric fiberoptic bronchoscope, halogen light source with flash for endoscopy, endoscopic video system, endoscopic table, endoscopy cart, endoscope washer-disinfector, ultrasonic cleaner, endoscopic suction pump, video endoscopy system, video duodenoscope, video gastroscope, endoscopic suction unit, enteroscope, low-energy laser unit, electrosurgical generator, endoscopic mucosal resection kit, balloon dilator) and consumable materials in quantities sufficient for trainees to individually acquire professional competencies, as well as other equipment necessary for implementing the residency program.
- 7.8 Computer equipment with network connectivity capability.
- 7.10 Audiences of the Simulation and Training Accreditation Center No. 1 B, equipped with phantom and simulation equipment, laboratory instruments and consumables: telementor, sintomed, ANATOMAGE 4. Interactive complex - 3D Pathological Anatomy, advanced Venepuncture Arm, Limbs & Things ltd, injection simulator, simulator for practicing chest puncture and drainage, blood pressure measurement simulator, BT-CEAB2, BTInc Seoulbranch, UN / DGN-VAult, Honglian. Z990, Honglian. tonometer, phonendoscope, pulse oximeter, negatoscope, SAMII, ExcellusTecnologies, auscultatory manikin, PAT, ExcellusTecnologies, Auscultatory manikin Bedside auscultation system SimulScope, abdominal patient simulator, Limbs&Things, clinical simulator for examination of the male pelvis Limbs&Things, Nursingbaby, simulator for training in the care and treatment of certain patients of the inpatient department for newborns NursingKid, simulator for practicing the care and treatment skills of certain inpatients of childhood, improved Bedford manikin female/male Adam, Rouilly, bladder catheterization simulator Limbs&Thingsltd, simulator for practicing tube feeding skills, KokenCo, SimBaby, Laerdal, newborn baby manikin for practicing neonatal resuscitation skills, ResusciBaby, Laerdal, Child CPR and Rescue Simulator, Child Choking Manikin Adam, Rouilly, Adult Choking Manikin Adam, Rouilly, BT-CPEA, BTInc Seoulbranch, SaveManAdvance, KokenCo, Ltd, Truman-Trauma Simulator, Cardiopulmonary Resuscitation (CPR) Simulator SHERPA, Apollo Computer Robot Simulator, CAE Healthcare, SimMan 3G Computer Robot Simulator, Ambulance Model, Zarnitsa Software, 15-Lead ECG Simulator Manikin, Nasco/Simmulaids. Nasco/Simmulaids Wound and Bleeding Attachment Set, Lumbar Puncture Phantom Simulator, KyotoKagakuCo, Ltd, Pediatric Lumbar Puncture Simulator Manikin. LT00310. LM-027, enema simulator. Dressings, medical furniture, consumables - in quantities sufficient for mastering the skills and abilities required by professional activity, individually. Library of laboratory and instrumental research results: Roles for standardized patients. Library of situational tasks. Library of clinical scenarios. Library of assessment sheets.