MINISTRY OF SCIENCE AND HIGHER EDUCATION OF THE RUSSIAN FEDERATION,MINISTRY OF SCIENCE, HIGHER EDUCATION AND INNOVATION

Kyrgyz-Russian Slavic University

named after the First President of the Russian Federation BN Yeltsin

APPROVED
by the Dean of the Faculty

ДЕКАНАТ МЕДИЦИНСКОГО ФАКУЛЬТЕТА

_____ 2025

Oncology, radiation therapy

working program of the discipline (module)

Assigned to the Department: **of Oncology and Radiation Diagnostics and Therapy**

Curriculum: Specialty 560001-KR Medical business (for internationalstudents)

Qualification: **Specialist**

Study form: **full**

-time Total labor: **intensity 3 Z**

Hours according to the: 108

including:

classroom classes: 64

independent work: 43.7

Types of control in semesters:
credit with an assessment of 11

Distribution of discipline hours by semester

Semester (<Course>.<Semester on the course>)	11 (6.1)		Total	
Weeks	18			
Type of classes	UP	RP	UP	RP
Lectures	16	16	16	16
Practical	48	48	48	48
Contact work during theoretical training	0.3	0.3	0.3	0.3
Including int.	4	4	4	4
Total aud.	64	64	64	64
Contact work	64.3	64.3	64.3	64.3
Self-work	43.7	43.7	43.7	43.7
Total	108	108	108	108

The program was prepared by:

Doctor of Medical Sciences, Professor, Head of the Department of Oncology and Radiation Therapy and Diagnosticsand Makimbetov E. K.
Teacher, Emilova S.. E.
Teacher, Zholdoshbekova N.Zh.

Reviewer(s):

Doctor of Medical Sciences, Professor, Bebezov B. Kh.
Doctor of Medical Sciences, Professor, Satylganov I.Zh.

The working program of the discipline

is developed in accordance with the Federal State Educational Standard
Federal State Educational Standard of higher education-specialty in the specialty 31.05.01 Medical Science (order of the Ministry of Education and Science of the Russian Federation No. 988 dated 12.08.2020)

is compiled on the basis of the curriculum:
Specialty 31.05.01. - RF, 560001-KR Medical business
(for international students)
approved by the academic council of the university from 30 June 2025 protocol no. 13

The working program was approved at the meeting of the department

Minutes No. 1
of 01.09.2025 Duration of the program: 2020-2026 academic year
Head of the department Makimbetov Emil Kozhoshevich

Approval of the RPA for implementation in the next academic year

Chairman of the UMS

__ _____ 2026 city of

The work program was reviewed, discussed and approved for
implementation in the 2026-2027 academic year at the meeting of the department

Minutes from __ _____ 2026 city no. __
Head of the Department Doctor of Medical Sciences, Professor Makimbetov EK

Approval of RAPS for implementation in the next academic year

UMS Chairman

__ _____ 2027 city of

The work program was reviewed, discussed and approved for
implementation in the 2027-2028 academic year at the meeting of the department

Minutes from __ _____ 2027 city no. __
Head of the Department Doctor of Medical Sciences, Professor Makimbetov EK

Approval of RAPS for implementation in the next academic year

UMS Chairman

__ _____ 2028 d

. The work program was reviewed, discussed and approved for
implementation in the 2028-2029 academic year at the meeting of the department

Minutes from __ _____ 2028 City no. __
Head of Department. department Doctor of Medical Sciences, Professor Makimbetov EK

Approval of RAPS for implementation in the next academic year

UMS Chairman

__ _____ 2029 city of

The work program was reviewed, discussed and approved for
implementation in the 2029-2030 academic year at the meeting of the department

Minutes from __ _____ 2029 city no. __
Head of the Department Doctor of Medical Sciences, Professor Makimbetov EK

1. GOALS OF MASTERING THE DISCIPLINE	
1.1	The general purpose of teaching oncology is to develop general medical knowledge and to teach the basics of cancer diagnosis and treatment. At the same time, it is necessary to pay attention to the issues of prevention and early diagnosis of the most common forms of tumors, such as lung cancer, stomach cancer, breast cancer and others.
1.2	The program is designed in such a way that students get a holistic view of oncology, have the opportunity to conduct differential diagnostics with other diseases

2. PLACE OF THE DISCIPLINE IN THE STRUCTURE OF OOP	
Cycle (section) OOP:	B1. B
2.1	**Requirements for preliminary training of a student:**
2.1.1	Anatomy
2.1.2	Pathological anatomy
2.1.3	Histology, embryology, and cytology
2.1.4	Pharmacology
2.1.5	Pathophysiology, clinical pathophysiology
2.1.6	Infectious diseases
2.1.7	Obstetrics and Gynecology
2.1.8	Traumatology, orthopedics
2.1.9	Otorhinolaryngology
2.1.10	General surgery
2.1.11	Propaedeutics of internal diseases
2.1.12	Microbiology, virology
2.1.13	Hospital therapy
2.1.14	Pediatric surgery
2.1.15	Hospital surgery
2.1.16	Outpatient therapy
2.1.17	Psychotherapy
2.1.18	Ophthalmology
2.1.19	Psychiatry, medical psychology
2.1.20	Clinical Biochemistry
2.1.21	Clinical Pharmacology
2.1.22	Clinical Practice (Assistant Physician)
2.1.23	Neurology, Medical Genetics, Neurosurgery
2.1.24	Public health and Healthcare, Health Economics
2.1.25	Occupational Diseases
2.1.26	Urology
2.1.27	Faculty of Therapy
2.1.28	Faculty of Surgery
2.1.29	Endocrinology
2.1.30	Epidemiology
2.1.31	Radiation diagnostics
2.1.32	Fundamentals of emergency care
2.1.33	Practical training to gain professional skills and experience in professional activities(Assistant to a procedural nurse)
2.1.34	Topographic Anatomy and Operative Surgery
2.1.35	Bioethics
2.1.36	Biochemistry
2.1.37	Normal Physiology
2.1.38	Immunology
2.1.39	Biology
2.1.40	History of Medicine
2.1.41	Latin

2.2	Disciplines and practices for which the development of this discipline (module) is necessary as preliminary:
2.2.1	Psychotherapy
2.2.2	Dermatovenereology
2.2.3	Phthisiology
2.2.4	Traumatology and orthopedics
2.2.5	Hospital therapy
2.2.6	Outpatient therapy

3. THE STUDENT'S COMPETENCIES FORMED AS A RESULT OF MASTERING THE DISCIPLINE(MODULE)	
PC-9: readiness to manage and treat patients with various nosological forms inoutpatient and day hospital	
Settings To know:	
Level 1	etiology, pathogenesis, clinic of major diseases with various nosological forms;
Level 2	main types and methods of treatment of patients with various nosological forms;
Level 3	methods of management and treatment of patients with various nosological forms in outpatient and day hospital settings.
Be able to:	
Level 1	correctly identify this disease;
Level 2	compare different types and methods of treatment of patients with different nosological forms, develop a treatment plan for diseases;
Level 3	manage and treat patients in outpatient and day hospital settings.
Own:	
Level 1	skills in analyzing different types of treatment for patients with different nosological forms;
Level 2	techniques for finding and comparing different methods of treatment for patients with different nosological forms;
Level 3	skills in managing and treating patients with various diseases in outpatient and day hospital settings.

PC-8: ability to determine the management tactics of patients with various nosological forms	
To know:	
Level 1	etiology, pathogenesis, clinic of diseases;
Level 2	main types and methods of treatment of patients with various nosological forms;
Level 3	main directions and problems in the management of patients with various diseases.
Be able to:	
Level 1	to reveal the meaning of determining the management tactics of patients with various diseases;
Level 2	to compare different types and methods of treatment of patients with various nosological forms,to develop a treatment plan for diseases;
Level 3	note the practical value of requiring emergency medical care. individual management tactics of patients with various nosological forms.
Own:	
Level 1	skills in presenting and analyzing the etiology and pathogenesis of various clinical diseases for making a diagnosis;
Level 2	techniques for finding and comparing different treatment methods for patients with various nosological forms;
Level 3	skills in determining the management tactics of patients with diseases.

PC-6: ability to determine the patient's main pathological conditions, symptoms, syndromesof diseases, nosological forms in accordance with the International Statistical Classification of Diseases andHealth problems, X revision	
Know:	
Level 1	methods of research to identify the main pathological conditions, symptoms, syndromes of diseases, nosological forms;
Level 2	specifics of identifying various types of pathological conditions, symptoms, syndromes of diseases, nosological forms in accordance with ICD X revision;
Level 3	main syndromes of organ and system damage and their specifics in the differential diagnosisof various nosological forms in the Russian Federation. In accordance with ICD X
, you should be able to:	
Level 1	to understand the results of the study of the main nosological forms of diseases;

Level 2	analyze different types of pathological conditions, symptoms, syndromes of diseases, nosological forms in accordance with the ICD;
Level 3	note the practical value when comparing specific pathological syndromes, symptomsof diseases.
Own:	
Level 1	skills in identifying the main pathological conditions, symptoms, and syndromes of diseases;
Level 2	techniques for searching, identifying, and systematizing the main pathological conditions, symptomsof disease syndromes, and nosological forms in accordance with ICD X revision;
Level 3	skills in self-justifying combining various symptoms and syndromes into nosologicalforms in accordance with (ICD X revision).

PC-5: readiness to collect and analyze patient complaints, medical history, examination results, laboratory, instrumental, patho-anatomical and other studies in order to recognize the condition or establish the fact of the presence or absence of the disease	
To know:	
Level 1	methods and means of collecting and analyzing patient complaints, medical history data, indications and contraindications for conducting additional clinical and paraclinical research methods;
Level 2	the need to collect and analyze patient complaints, medical history data;
Level 3	indications and contraindications for conducting additional clinical and paraclinicalresearch methods.
Be able to:	
Level 1	collect and analyze patient complaints, medical history data;
Level 2	prescribe laboratory, instrumental, pathoanatomical and other studies in order to recognize the condition or establish the fact of the presence or absence of the disease;
Level 3	use methods and means of medical examination, diagnostic measures.
Own:	
Level 1	skills in collecting and analyzing patient complaints, medical history data, interpreting the results of the most common functional diagnostic methods used to detect blood, heart and vascular pathology, lungs, kidneys, liver and other organs and systems;
Level 2	skills in writing a medical history, prescribing the necessary laboratory and instrumental examination methods for recognizing state or establishing the fact of the presence or absence of a disease;
Level 3	skills in constructing a clinical diagnosis.

As a result of mastering the discipline, the student should

3.1	**already know:**
3.1.1	maintenance of approved forms of accounting and reporting documentation, epidemiology of oncological diseases;
3.1.2	clinical manifestations of all tumor diseases, examination methods that allow them to be diagnosed or excluded;
3.1.3	algorithm for using examination methods;
3.1.4	principles of organizing cancer care in the Russian Federation and the Kyrgyz Republic, general issues of organizing cancer care for the population, the work of oncological
3.1.5	knowledge of the principles of medical ethics and deontology, maintaining approved forms of accounting and reporting
3.1.6	etiopathogenesis of malignant tumors, clinical manifestations of all tumordiseases, methods of examination that allow them to be diagnosed or excluded.
3.1.7	algorithm of use of examination methods, methods of treatment of all types of tumor diseases
3.1.8	medical institutions where patients can and should receive this treatment, prognosis (life, laboratory, social) for each disease, opportunities and methods of tumor prevention;
3.1.9	ethics of communication with cancer patients and their relatives;
3.1.10	qualified collection of anamnesis, methods of physical examination3
3.1.11	.1.11 general issues of organization of medical and preventive care and provision of medicines to various groups of the population in accordance with nosological forms of diseases;
3.1.12	ethical standards for the use of medicines, both when testing new and registered ones;
3.1.13	forms of information about new medicines, taking into account the effectiveness, dosage regimen, interaction and side effects;
3.1.14	basic principles of clinical and pharmacological characteristics of medicinal products used in generalmedical practice;

3.1.15	side effects of medicinal products, predicted and unpredictable, ways to prevent and correct side effects of medicinal products.
3.2	**Be able to:**
3.2.1	choose the most informative methods of physical, instrumental and laboratory examination;
3.2.2	summarize and correctly evaluate the results of the examination;
3.2.3	assess the severity of the patient's condition, apply the necessary measures to remove patients from this condition;
3.2.4	assess the severity of the patient's condition, apply the necessary measures to remove patients from this condition,
3.2.5	determine the scope and sequence of treatment measures; conduct emergency and resuscitation measures; choose the most effective treatment methods for each individual patient;
3.2.6	rationally plan algorithms for combined and complex treatment;
3.2.7	rationalize the results of medical and diagnostic work with cancer patients;
3.2.8	organize an information system in the medical institution on the choice of medicines, their
dosage	regimen, interaction, predicted side effects;
3.2.10	monitor the use of medicines in a medical institution, their expiration dates,
3.2.11	compliance with compatibility, compliance with storage rules;
3.2.12	assist in choosing combination therapy in order to exclude undesirable interactions,increase side effects, reduce the effectiveness of the base drug; conductpharmacotherapy for hospital and polyclinic doctors, taking into account the severity of the disease, functional systems, biorhythm
3.2.13	provide assistance in choosing combination therapy in order to exclude undesirable interactions,increase side effects, and reduce the effectiveness of the base drug.
3.3	**Own:**
3.3.1	qualified collection of medical history, physical examination methods;
3.3.2	method of differential diagnosis of malignant neoplasms and urgent conditions;
3.3.3	methods of material collection for morphological examination (smears, scrapings, punctures);
3.3.4	method of analysis of cases of late detection of oncological diseases, analysis of discrepancies
3.3.5	diagnoses (main, concomitant and their complications) and causes of deaths, developmentof measures to improve the quality of medical and diagnostic work;
3.3.6	ethics of communication with cancer patients and their relatives; qualified collection of anamnesis,methods of physical examination;
3.3.7	treatment methods (depending on the chosen specialty profile), operative or drug management and monitoring at all stages of treatment, ways to correct the developed complications;
3.3.8	fundamentals of rational pharmacotherapy, taking into account the severity of the disease, the stateof functional systems, genetic drug pharmacokineticmonitoring data;
3.3.9	methods of correction of pharmacotherapy in patients who have been diagnosed with adverse side effects drugs or are resistant to the current pharmacotherapy;
3.3.10	fundamentals of the work of the clinical expert commission;
3.3.11	methods of departmental examination of the quality of the conducted pharmacotherapy

4. STRUCTURE AND CONTENT OF THE DISCIPLINE (MODULE)

Class code	Name of sections and topics /class type/	Semester /Course	of Hours	Competencies-of	Literature	Inte rakt.	Pr. podg.	Note
	Section 1. Section 1. Generaloncology							
1.1	Current problems in oncology. Organization of oncological services in Russia and Kyrgyzstan / Lek /	11	2	PK-5	L1. 1L2. 1L2. 2L2. 3L3. 1L3. 2 L3. 3L3. 4			
1.2	Basic theories of cancer occurrence and development Pathogenesis of clinical symptoms. Principles of diagnosis and treatment of malignant	11	2		L1. 1L2. 1L2. 2L2. 3L3. 1L3. 2 L3. 3L3. 4			

1.3	Basic theories of cancer occurrence and development. Pathogenesis of clinical Symptoms. Principles of diagnosis of malignant	11	3	PK-5 PK-8	L1. 1L2. 1L2. 2L2. 3L3. 1L3. 2 L3. 3L3. 4			
1.4	Modern problems of oncology. Organization of oncological services in Russia and Kyrgyzstan / Pr /	11	3	PK-5	L1. 1L2. 1L2. 2L2. 3L3. 1L3. 2 L3. 3L3. 4			
1.5	Questions of ethics and deontology in oncology. Accounting and others documentation for	11	3	PK-8 PK-9	L1. 1L2. 2L2. 3L3. 1L3. 2 L3. 3L3. 4			
1.6	pathological syndromes in cancer diseases /Sr/	11	3		L1. 1L2. 1L2. 2L2. 3L3.1L3. 2 L3. 3L3. 4			
1.7	New developments in cancer treatment. Immunotherapy rehabilitation in oncology. Polclinical	11	3	pcs-8	L1. 1L2. 1L2. 2 L2. 3			
1.8	Study of the organization of oncological services with the statistical department	11	2	PC-9	L1. 1L2. 1L2. 2 L2. 3			
1.9	Study of accounting and reporting forms of documentation /Wed/	11	2		L1. 1L2. 1L2. 2 L2. 3			
1.10	Primary and secondary prevention of cancer and precancerous diseases in the conditions of the NCO polyclinic	11	2	PK-8 PK-9	L1. 1L2. 1L2. 2 L2.3			
	Section 2. Section 2. Private oncology							
2.1	Lung Cancer /Lek/	11	2	PC-5 PC-8	L1. 1L2. 1L2. 2L2. 3L3. 1L3. 2 L3. 3L3. 4			
2.2	Precancer and skin cancer. Melanoma / Lek /	11	2	PC-8	L1. 1L2. 1L2. 2L2. 3L3. 1L3. 2 L3. 3L3. 4			
2.3	Mastopathy and breast cancer. / Lek /	11	2	PK-9	L1. 1L2. 1L2. 2L2. 3L3. 1L3. 2 L3. 3L3. 4			
2.4	Colon and rectal cancer . Cancer of the stomach, pancreas and liver. /Lek/	11	2		L1. 1L2. 1L2. 2L2. 3L3. 1L3. 2 L3. 3L3. 4			
2.5	Precancer and skin cancer. Melanoma. Bone and soft tissue sarcomas. / Pr /	11	3	PCS-5	L1. 1L2. 1L2. 2L2. 3L3. 1L3. 2 L3. 3L3. 4			

2.6	Primary multiple tumors. The problem of metastasis in onology. Cancer metastases with an undetected primary focus. /Pr/	11	3	PC-8	L1. 1L2. 1L2. 2L2. 3L3. 1L3. 2 L3. 3L3. 4			
2.7	Head and neck tumors. /Pr/	11	3	PC-5	L1. 1L2. 1L2. 2L2. 3L3. 1L3. 2 L3. 3L3. 4			
2.8	Mastopathy and breast cancer. / Pr /	11	3		L1. 1L2. 1L2. 2L2. 3L3. 1L3. 2 L3. 3L3. 4			
2.9	Lung cancer. / Pr /	11	3	PC-5	L1. 1L2. 1L2. 2L2. 3L3. 1L3. 2 L3. 3L3. 4			
2.10	Cancer of the esophagus and stomach. /Pr/	11	3	PC-8	L1. 1L2. 1L2. 2L2. 3L3. 1L3. 2 L3. 3L3. 4 E9			
2.11	Colon and rectal cancer /Pr/	11	3	PC-8	L1. 1L2. 1L2. 2L2. 3L3. 1L3.2 L3. 3L3. 4 E10			
2.12	Liver and pancreatic cancer. /Pr/	11	3	PC-9	L1. 1L2. 1L2. 2L2. 3L3. 1L3. 2 L3. 3L3. 4			
2.13	Precancer and cancer of the female genital organs (cervix and body of the uterus, ovaries, vulva) /Pr/	11	3	PC-8	L1. 1L2. 1L2. 2L2. 3L3. 1L3. 2 L3. 3L3. 4			
2.14	Hemoblastosis. Lymphogranulomatosis. Lymphosarcomas. / Pr /	11	3	PC-8	L1. 1L2. 1L2. 2L2. 3L3. 1L3. 2 L3. 3L3. 4			
2.15	Prostate, testicular and penile cancer. Kidney and bladder cancer. /Pr/	11	3	PC-8 PC-9	L1. 1L2. 1L2. 2L2. 3L3. 1L3. 2 L3. 3L3. 4			
2.16	Differential diagnosis of skin tumors, pigmented nevi and melanoma /Sr/	11	4	PC-8	L1. 1L2. 1L2. 2L2.3L3. 1L3. 2 L3. 3L3. 4 E1			
2.17	Outpatient admission of patients with thyroid disease /Wed/	11	4	PK-8	L1. 1L2. 1L2. 2L2. 3L3. 1L3. 2 L3. 3L3. 4 E2 E3 E4			

2.18	Differential diagnosis of mastopathy and breast cancer / Wed /	11	6	PK-8 PK-9	L1. 1L2. 1L2. 2L2. 3L3. 1L3. 2 L3. 3L3. 4 E5 E6 E7			
2.19	Differential diagnosis of lung cancer. Radiological signs of lung cancer. / Wed /	11	6	PC-5 PC-8	L1. 1L2. 1L2. 2L2. 3L3. 1L3. 2 L3. 3L3. 4 E8			
2.20	EGDOSCOPY for esophageal cancer EGDoscopy for esophageal and gastric cancer. /Wed/	11	2	PCs-5 PCS-9	L1. 1L2. 1L2. 2L2. 3L3. 1L3. 2 L3. 3L3. 4 E9			
2.21	Irrigoscopy for colon and rectal cancer. /Wed/	11	2	PC-8	L1. 1L2. 1L2. 2L2. 3L3. 1L3. 2 L3. 3L3. 4 E10			
2.22	Liver and pancreatic cancer (palpation and percussion). / Sr /	11	2	PC-8 PC-9	L1. 1L2. 1L2. 2L2. 3L3. 1L3. 2 L3. 3L3. 4 E11 E12			
2.23	Precancer and cancer of the female genital organs (cervix and body of the uterus, ovaries, vulva). /Cp/	11	2	PC-8 PC-9	L1. 1L2. 1L2. 2L2. 3L3. 1L3. 2 L3. 3L3. 4 E13 E14			
2.24	Radiological signs of bone tumors /Cp/	11	2	PC-9	L1. 1L2. 1L2. 2L2. 3L3.1L3. 2 L3. 3L3. 4 E15			
2.25	Cystoscopy for bladder cancer, finger examination / Sr /	11	1.7	PC-5	L1. 1L2. 1L2. 2L2. 3L3. 1L3. 2 L3. 3L3. 4 E16			
2.26	Precancer and cervical cancer. Cancer of the uterine body. Ovarian cancer. / Lek /	11	2		L1. 1L2. 1L2. 2L2. 3L3. 1L3. 2 L3. 3L3. 4			
2.27	Hemoblastosis. Lymphomas and leukemias. / Lek/	11	2		L1. 1L2. 1L2. 2L2. 3L3. 1L3. 2 L3. 3L3. 4			
	Section 3. Section 3. Radiation therapy							
3.1	Radiation therapy. Types of radiation therapy. Indications and contraindications to radiation	11	3	PK-5	L1. 1L2. 1L2. 2 L2. 3 E17			

3.2	Questions about private radiation therapy for localizations of ZNO /Pr/	11	3	PK-5 PK-9	L1. 1L2. 1L2. 2 L2. 3 E18			
3.3	/KrTO/	11	0.3		L1.1			
3.4	/Zachetsots/	11			L1.1			

5. Fund Evaluation Tools

5.1. Control questions and tasks

Questions to check the level of training TO KNOW:
1. Organization of cancer care in Russia and Kyrgyzstan.
2. The main biological features of the tumor tissue.
3. Screening studies aimed at detecting early forms of cancer. Medical examination system.
4. Skin cancer, melanoma.
5. Head and neck tumors.
6. Thyroid cancer.
7. Precancerous diseases and breast cancer.
8. Tumors of the reproductive system
9. Lung cancer.
10. Esophageal cancer. Stomach cancer. Cancer of the colon and rectum.
11. Cancer of the liver and pancreas.
12. Bone and soft tissue tumors.
13. Malignant lymphomas. Lymphogranulomatosis.
Tasks for checking the level of training to be ABLE
TO 1. Fill out the registration documentation for the cancer patient:
- notification of a newly diagnosed patient;
- control card of dispensary observation;
- extract from the medical history of the cancer patient;
- protocol for an advanced case of malignant neoplasm;
2. Interpret radiographs of various organs with typical signs of neoplasms; evaluate data from laboratory and instrumental studies. Detect a pathological shadow on the chest X-ray
;
3. Determine skin symptoms and symptoms from the nipple in breast cancer;
4.Suspect skin cancer, lower lip by external signs. To distinguish the appearance of melanoma from pigmented nevus;
5. To formulate a diagnosis of a malignant neoplasm with an assessment of the stage, clinical group;
6. To determine the clinical group of the cancer patient and outline the tactics of its management;
7. Follow-up of the patient with monitoring of blood parameters and provide medical care for complications during chemotherapy;
8. Analyze the results of the patient's examination with the appointment of adequate treatment tactics and further follow-up;
9. Conduct a step-by-step treatment of pain syndrome in an incurable cancer patient.
Tasks to check your proficiency level:
1. According to the handout, demonstrate proficiency in the technique of incisional and excisional biopsy;
2. According to the handout, demonstrate proficiency in the technique of performing a breast and lymph node puncture if a malignant process is suspected;
3. According to the handout, demonstrate proficiency in the technique of conducting a diagnostic puncture, taking smears, fingerprints, scrapings for genital tumors;
4. According to the handout, demonstrate proficiency in the technique of finger examination with the interpretation of detected changes;
5. According to the handout, demonstrate proficiency in the technique of surgical interventions: excision of soft tissue tumors, puncture of the pleural and abdominal cavity;
6.Demonstrate practical skills in conducting assistance during standard surgical interventions for tumors of various localizations on the layout.

5.2. Topics of coursework (projects)

no coursework is provided

5.3. Evaluation Fund

Test (Appendix 1)
Situational tasks (Appendix 2)
Report (annex 3)
Abstract (Appendix 4)

5.4. List of types of assessment tools

Test
Situational tasks
Report

Summary of the assessment scale by types of assessment tools in APPENDIX 5

6. EDUCATIONAL, METHODOLOGICAL AND INFORMATIONAL SUPPORT OF THE DISCIPLINE (MODULE)			
6.1. Recommended literature			
6.1.1. Main literature			
	Authors,	Title	Publisher, year
L1.1	ZP Kamarli	Oncology	2013
6.1.2. Additional literature			
	Authors,	Title	Publisher, year
L2.1	Gantsev Sh. Kh.	Oncology: Textbook	Moscow: OOO "Meditsinskoeinformatsionnoe agency"2006
L2.2	Cherenkov VG	Clinical Oncology: A	
L2.3	Chissov VI, Darialova SL	Oncology: a textbook with a compact disc	Moscow: GEOTAR-Media 2007
6.1.3. Methodological developments			
	Authors,	Title	Publisher, year
L3.1	Comp.: EKMakimbetov, IGBauer, AA UsenovaZ. P.Kamarli	Course of lectures on hemoblastoses	Bishkek: KRSU Publishing House 2009
L3.2	Kamarli ZP,Makimbetov	Course of lectures on oncourology: course	Bishkek: KRSU Publishing House 2016
L3.3	Makimbetov EK	Course of lectures on	Bishkek: KRSU Publishing House 2006
L3.4	Makimbetov EK, Tsopova IA, Usenova A. A., Raimzhanov AR	Acute leukemias: methodological recommendations	Bishkek: KRSU Publishing House 2006
6.2. List of resources of the Internet information and telecommunications network			
E1	Russian Medical Oncology Portal		https://oncology.ru/Э2
E2	Internet portal of the Russian Society of Clinical Oncology		https://www.rosoncoweb.ru/Э3
E3	Thyroid cancer		https://www.euroonco.ru/oncology
E4	Thyroid Cancer		www.docrates.com/ru/tipyraka/rak-shchitovidnoj
E5	Breast Cancer		https://oncology-association.ru/docs/rak_molassociation.ru/docs/rak_mol
E6	Breast cancer		http://omr.by/sites/default/files/struktura/22_Breast_Can
E7	Breast Cancer		cer.pdfhttp://www.rcrz.kz/docs/clinic_protocol / 2015/%D0%
E8	Lung		cancerhttp://omr.by/sites/default/fil es/struktura/17_Lung_Canc
E9	Gastroscopy		er. pdfhttp://03book.ru/upload/iblock/aa5 / 236_Gastroskopijap
E10	Prevention of colon cancer		Blocks. pdfhttp://www.okd.ru/patient/it_important/doc/73.pdf E11important/doc/73.pdf
Pancreatic	cancer		http://www.polysalov.vipvrac h.ru/download/Rak_podzhelE12
Pancreatic	cancer		udochnoj_zhelezy. pdfhttp://www.esmo.org/content/download/94983/1713170/
E13	Clinical guidelines for the diagnosis and treatment of patients with ovarian,		cancer/docs/recome
E14	http://oncologyassociation.ru/docs/recome E14 Targeted therapy for ovarian cancer		http://umedp.ru/upload/iblock/982/98294f7383efda6e3c
E15	Primary bone tumors and bone metastases. Diagnosis and treatment		principleshttp://window.edu.ru/resource/201/63201/files/m1. pdf
E16	E16 Bladder cancer		https://oncology-association.ru/docs/recomeassociation.ru/docs/recome

E17	Radiation protection in radiation therapy	5vz-rek. pdfhttp://omr.by/sites/default/files/radiacionnaya_zashchita
E18	Radiation therapy in the treatment of inoperable locally advancedesophageal cancer	http://03book.ru/upload/iblock/e99/409_Luchevaja_tera

6.3. List of information and educational technologies	
6.3.1 Competence-based educational technologies	
6.3.1.1	Traditional educational technologies – lectures, seminars focused primarily on the communicationof knowledge and methods of action, transmitted to students in a ready-made form and intended for reproducing assimilation and analysis of specific samples. The lecture material is provided to students usingmultimedia equipment and periodic presentation of thematic patients. Use of wardsand study rooms for students' work.
6.3.1.2	Innovative educational technologies-form systems thinking and the ability to generateideas when solving various situational problems. These include electronic texts of lectures with presentations.Multimedia complex laptop, personal computer. Sets of slides, tables of multimediavisual materials on various sections of the discipline. Visual aids, stands.
6.3.1.3	Information educational technologies – independent use of computer equipment and Internet resources by the student to perform practical and independent work. For better assimilation of the material and independent work, students prepare essays, reports and presentations.
6.3.2 List of information reference systems and software	
6.3.2.1	Electronic library system "ZNANIUM.COM"
6.3.2.2	Information system "Single window of access to educational resources" (http://window.edu.ru/)
6.3.2.3	"Electronic library" of KRSU (www.lib.krsu.kg)

7. MATERIAL AND TECHNICAL SUPPORT OF THE DISCIPLINE (MODULE)	
7.1	Clinical base National Center of Oncology and Hematology of the Ministry of Health of the Kyrgyz Republic.
7.2 bed	capacity of 400, more than 13 clinical departments, 2 diagnostic departments. 2 surgical buildings, 2 buildings
7.3	for radiation therapy, 2 operating rooms, 1 intensive care unit.The National Center of Oncology has equipment and
7.4	equipment for the diagnosis and treatment of cancer patients: X-ray diagnostic complexes-3;
7.5	mammographs-2; endoscopic equipment-5; ultrasound devices-5; radiation therapy devices-3 with
7.6	computed tomography for topometry. Students have access to all departments. The department has
7.7	rooms with a separate entrance, a total area of 64 m2, including 3 study rooms with 45 seats.
7.8	In addition, there is 1 training room in the main surgical building on the 1st floor, with 18 seats
7.9	.The department has technical facilities: 1 PC, 1 personal computer, multimedia projector with
7.10	netbook and screen. There are 4 stands and 20 visual aids, which are located in the training rooms;
7.11	educational films – 3. Lectures are held in a large conference hall of the National Cancer Center with 400 seats.

8. GUIDELINES FOR STUDENTS ON MASTERING THE DISCIPLINE (MODULE)

Technological map of the discipline in APPENDIX 6
Training consists of classroom classes (72 hours), including a lecture course and practical exercises, and
independent work (108 hours). The main academic time is allocated to practical work in oncology.
When studying an academic discipline, it is necessary to use theoretical knowledge and master practical skills in
oncology.
Practical classes are conducted in the form of a survey, demonstration of training slides and the use of visual aids,
solving situational problems, answering test tasks, and analyzing clinical patients.
Independent work of students involves preparing for practical classes, writing essays, performing
creative tasks and includes working with educational literature, lecture material, and working with electronic Internet resources on oncology.
Working with educational literature is considered as a type of educational work in the discipline oncology and is performed
within the hours allotted for its study (in the section SRS).
Each student is provided with access to the library collections of the University and the Department.
Methodological recommendations for students and guidelines for teachers have been developed for specific sections of the discipline
.
While studying the academic discipline, students independently conduct an examination of an oncological patient.
Writing an abstract and academic medical history contributes to the formation of competencies of theoretical and practical
skills (abilities).
The student's work in a group creates a sense of teamwork and sociability.
The training of students contributes to the development of communication skills with the patient, taking into account the ethical and
deontological
features of pathology and patients. Independent work with patients contributes to the formation of medical
behavior, accuracy, discipline.
The initial level of knowledge of students is determined by testing, the current control of mastering the subject is determined
by an oral survey during classes, during clinical reviews, when solving typical situational problems and answering questions.

test tasks.
At the end of the study of the academic discipline (module), an intermediate control of knowledge is carried out using test control, testing practical skills and solving situational problems.
SITUATIONAL TASK.
Example of implementation in APPENDIX 7
REPORT.
Preparing a report for the lesson.
Main stages of preparing the report:
* selecting a theme.
• teacher's consultation;
• preparation of the report outline;
• working with sources and literature, collecting material;
• writing the report text;
• preparation of the manuscript and providing it to the teacher before the start of the report, which determines the student's readiness to speak;
• presentation, answers to questions.
The topic of the report is suggested by the teacher in the feedback form.
ABSTRACT
Recommendations for writing an abstract.
1. The topic of the abstract is chosen in accordance with your interests and should correspond to the given sample list. It is important that the abstract: firstly, highlights both the natural-scientific and social aspects of the problem; and secondly, presents both general theoretical provisions and specific examples. Using your own examples from the life around you is especially welcome.
2. The abstract should be based on the elaboration of several additional sources to the main literature. As a rule, these are special monographs or articles. It is also recommended to use as additional literature popular scientific journals, as well as newspapers specializing in cancer topics.
3.The outline of the abstract should be author's. It shows the author's approach, opinion, and analysis of the problem.
4. All facts and borrowed considerations presented in the abstract should be accompanied by references to the source of information. For example:... Pancreatic cancer (PC) belongs to the group of malignant gastrointestinal tumors, namely biliopancreatoduodenal zone, which also includes tumors of the large duodenal papilla and extrahepaticbile ducts (Arsangireeva G. Zh., 1992; Gracheva NA, 2006;) ...
5. It is unacceptable to simply compose an abstract from pieces of borrowed text. All citations must be presented in quotation marks, with the source and page indicated in parentheses. The absence of quotation marks and links means plagiarism and, in
in accordance with established scientific ethics, is considered a gross violation of copyright.
6. The abstract is drawn up in the form of text on sheets of standard format (A - 4) in TimesNewRoman font, 14. It begins with the title page (drawn up according to the model of APPENDIX 8), which indicates the name of the university, academic discipline, topic of the abstract, last name and initials of the student, year and geographical location of the university. This is followed by a table of contents indicating the section pages. It is advisable to divide the text of the abstract itself into sections: chapters,
sub-chapters and title them. The use of quantitative data and illustrations (graphs,
tables, diagrams, figures) in the abstract is encouraged.
7. Complete the abstract with sections "Conclusion" and "List of references". In conclusion, the main conclusions are presented, clearly formulated in abstract form and usually numbered.
8. The list of references must be compiled in full compliance with the current standard (rules), including special punctuation marks. To do this, it is enough to use as an example any book published by major scientific publishers: "Science", "Oncology", "Radiation Therapy", etc. Or the above list of references. In general, the most commonly used order of bibliographic references in our country is as follows:
Author Full name of the book. Place of publication: Publisher, Year of publication. Total number of pages in the book.
Author IO Title of the article // Title of the journal. Year of publication. Volume__. No.__. Pages from __ to ___.
Author Full name of the article / Collection title. Place of publication: Publisher, Year of publication. Pages from __ to ___.
Approximate content of the work:
Title: Volume: 13-15 pages.