

Federal State Autonomous Educational Institution of Higher Education
«Peoples' Friendship University of Russia»

Medical Institute

Recommended MCSD

SYLLABUS
(STUDY GUIDE)

Subject

Oncology

Recommended for the direction of training (specialty)

31.05.01 General Medicine

Program (profile, specialization)

General Medicine

1. Aims and objectives of discipline:

Objective: To ensure the training of specialists in the program of medical affairs. Section oncology.

Objectives: To provide theoretical and practical training of doctors in the specialty of medicine in matters of modern diagnostics and treatment of oncological diseases.

2. Place of discipline in the structure of OP HE:

Discipline Oncology refers to the basic part of Block 1 of the curriculum.

Table №1 given preceding and following discipline aimed at forming competence discipline in accordance with the matrix competences OP HE.

Table 1. Preceding and following the discipline aimed at creating competencies

№ п/п	Code and title of competence	Preceding disciplines	Following disciplines
General Cultural Competences			
General Professional Competences			
	ОПК-1, ОПК-3, ОПК-5, ОПК-8, ОПК-11	Therapy, pat.anatomy	
Professional Competences (type of professional activity medical activity)			
	ПК-1, ПК-5, ПК-6-11, ПК-13, ПК-16	Surgery	

3. Requirements to results of development of discipline:

The process of discipline is aimed at formation of the following competences:

5.3. Graduate who have completed the program specialist must possess the following professional competencies:

willingness to solve standard tasks of professional activity with the use of information, bibliographic resources, biomedical terminology, information and communication technologies and taking into account the basic requirements of information security (MIC-1);

ability and readiness to realize ethical and deontological principles in their professional activities (MIC-4);

willingness to medical records (OPK-6);

ready to medical use of drugs and other substances and their combinations in the solution of professional tasks (MIC-8);

the ability to assess morphological, physiological States and pathological processes in the human body for the solution of professional tasks (MIC-9);

5.4. Graduate who have completed the program specialist must possess the professional competences corresponding to the type (types) of professional activities, which (who) focused program specialties:

medical activities:

ability and willingness to implement the complex of measures aimed at the preservation and promotion of health and includes the promotion of healthy lifestyles, prevention and (or) distribution of diseases, their early diagnosis, the identification of the causes and conditions of their emergence and development, as well as to eliminate the harmful effects on human health of factors in the environment (PK-1);

ability and willingness to conduct preventive medical examinations, clinical examinations and implementation of follow-up (PK-2);

readiness for the collection and analysis of patient's complaints, data of anamnesis, physical examination, laboratory, instrumental, post-mortem and other studies in order to determine the state or of ascertaining the presence or absence of the disease (PC-5);

ability to determine the patient's major disease States, symptoms, syndromes, diseases, nosological forms in accordance with the International statistical classification of diseases and related health X edition (PC-6);

readiness to carry out expert examination of temporary disability, participate in conducting medico-social examination, the ascertaining of biological death of a human (PK-7);

ability to determine the tactics of conducting patients with various nosological forms (PK-8);

willingness to managing and treating patients with different nosological forms of outpatient and day hospital (PC-9);

willingness to participate in the provision of emergency medical services for conditions requiring urgent medical intervention (PC-11);

As a result of studying the discipline, the student must:

Know: Clinical manifestations of malignant pathological processes.

1. Diagnostic value of laboratory, radiological, ultrasound, endoscopic, radioisotope, magnetic resonance symptoms of malignant pathology

2. The main methods of radical treatment of cancer patients (surgical, radiation, drug methods, combined and complex treatment)

3. The complex of methods for providing specialized palliative care to cancer patients

4. Monitoring system after special treatment of malignant neoplasms and methods of treating recurrences of diseases

To be able to: Perform an examination, physical examination of patients with suspected malignant lung diseases (percussion, palpation and auscultation) identifying the main symptoms of the disease and plan instrumental clarifying diagnostics;

- during a general examination of the patient, determine the facial expression, state of consciousness and the adequacy of perception of the surrounding, position in bed, physique, constitution, nutritional status, presence of a temperature reaction, skin and visible mucous membranes (color, presence of eruptions, lymph nodes hemorrhages, subcutaneous tissue) muscle;

- when examining patients with malignant diseases of the respiratory organs, determine the shape of the chest and its deformation, frequency, depth and rhythm of breathing, determine the boundaries of the lungs, changes in percussion sound during comparative percussion (lung sound, dullness), during auscultation determine vesicular respiration, bronchial respiration, wheezing of various types, crepitus, bronchophony, on the basis of physical data to develop a sequential algorithm for the diagnosis of malignant neoplasms of the lungs (computer fluorography, computed tomography, angiography, bronchoscopy, percutaneous transthoracic biopsy, endobronchial biopsy, histological and cytological examination of tumor biopsy specimens, magnetic resonance imaging and abdominal ultrasound, osteosyntigraphy to clarify local and distant lung cancer metastasis);

- in the study of patients with suspected malignant lesions of the stomach, palpation to determine the boundaries, position and pathological changes of the stomach (tenderness, splashing noise, presence of palpable infiltrates in the anterior wall, displaceability), the presence of ascitic fluid in the abdominal cavity, the presence of palpable metastases in the liver and abdominal cavities, the presence of specific metastatic lesions (Virchow metastasis, metastasis to the navel, metastasis to the ovaries - Krukenberg, metastases to the pelvic tissue - Schnitzler), will determine the severity of the pathological process, depending on the patient's condition and the prevalence of the tumor, identify symptoms of complications of the tumor process (esophageal stenosis, antral stenosis, tumor perforation, gastric bleeding during tumor decay),

correctly determine the algorithm of subsequent instrumental diagnostics (gastroduodenoscopy, X-ray examination of the stomach and Duodenal ulcer, gastroduodenobiopsy, morphological study of biopsy specimens from the stomach, ultrasound tomography; Afifyan; laparoscopy, computed tomography);

- in the study of patients with malignant intestinal lesions, palpation to determine the presence of tumor infiltrates in the abdominal cavity along the intestines, to detect pain, surface condition, bias, diameter, the presence of increased intestinal noise, the presence of metastatic changes in the abdominal cavity, ascites, palpation of liver metastases, presence splashing noise, swollen intestinal loops, lack of feces during digital examination of the rectum, the presence of bleeding from the rectum, to make an algorithm minutes instrumental diagnostics (radiography bowel, colonoscopy, endosko-scopic biopsy morphological study of biopsy samples, ultrasonic tomography abdominal plain radiography in the presence of intestinal obstruction symptoms);

- during examination of patients with neoplasms of the esophagus, to detect symptoms of dysphagia, regurgitation and esophageal vomiting, palpation to detect metastatic lesions of the liver and lymph nodes of the abdominal cavity, the presence of pain syndrome in the chest, the presence of metastatic lesions of the lymph nodes of the neck, the presence of hilar lymph nodes (affection of the sympathetic lesions of the lymph nodes of the neck, the presence of hilar lymph nodes (affection of the sympathetic lymph nodes of the neck, lesion of the hilar lymph nodes) lesion of the recurrent nerve, lesion of the vagus nerve, germination in the trachea and bronchi), diagnostic planning depending on the spread of the tumor process and the severity of the clinical condition of the patients (x-ray examination of the esophagus, esophagogastroscope, esophagiopsy, morphological examination of biopsy specimens from the esophagus, computed tomography of the neck, chest, abdominal cavity, ultrasound tomography of the neck, above the infraclavicular lymph nodes, axillary lymph nodes, abdominal cavity, lapar, lymph nodes, abdomen, lymph nodes, abdomen, lymph nodes, abdomen, lymph nodes, abdomen, lymph nodes, abdominal cavity);

- in case of malignant lesions of the mammary gland, correctly assess the size, shape and condition of the skin of the mammary gland, identify nodular lesions in the mammary gland and carry out their differential diagnosis (malignant tumor, fibroadenoma, nodular mastopathy, cyst), if a new mammary gland is suspected, determine its size, localization, consistency, displaceability, presence of a capsule, skin symptoms, condition of the nipple of the mammary gland (retraction, abnormal discharge from the nipple), basic condition x lymphatic drainage collectors from the mammary gland (axillary, cervical, supraclavicular, subclavian, parasternal), determine secondary lesions of the liver, skeleton, brain, determine the algorithm of instrumental examination of patients (laboratory diagnostics: biochemical blood test, complete blood and urine analysis, ultrasound tomography, mammography, dopplerography, puncture of the mammary gland formations under the control of ultrasound and special x-ray attachments-cytograid, histological, cytological and immunohistochemical studies of tumor biopsy specimens, bone scintigraphy, abdominal ultrasound tomography, computed and magnetic resonance imaging);

- in case of malignant tumors of the thyroid gland, palpation determine the size, density of the thyroid gland, the presence of nodules, the nature of their surface, size, localization, displaceability, the presence of a total change in thyroid tissue, and the correct diagnosis algorithm (ultrasound tomography of the thyroid gland and neck, computed tomography of the neck, thyroid scintigraphy, osteocintigraphy, laboratory diagnostics: studies on the same thyroid hormones ezy, blood chemistry, complete blood count and urinalysis, blood clotting);

- in malignant disease of the lymphatic system palpation to detect enlarged lymph nodes of the neck, over - and subclavian lymph nodes, axillary, inguinal, popliteal lymph nodes, their size, texture, removability, the presence of pain, skin lesions, liver, bones, and the presence of pruritus and signs of scratching, the presence of the reaction temperature, the shape and the velocity of the spleen and send the patient to the special methods of examination (ultrasound imaging of the changed lymph nodes, CT of lungs and abdomen, and incisional tangihanga of biospy to

determine the morphological and immunohistochemical forms of lymphomas, sternal puncture, laboratory studies of blood);

- in case of malignant skin lesions, to detect changes on the skin in the form of plaques, polypoid formations, ulcers, pigment lesions (presence of pigment or its absence, presence of hair in the area of education, presence of skin pattern on the surface of the formation, erosion on the surface of plaques, nature of ulceration); send the patient to carry out an instrumental morphological verification of the diagnosis (imprints from the surface of the formations during erosion or after scarification, puncture biopsy for skin cancer), instrumental diagnostics of metastatic lesions in melanoma (computed tomography of the lungs, abdominal cavity, head smear, bone scan);

- when tumors of the pancreas and bile ducts to assess the nature of the colouring of the skin (dozatora or icteric stage of the process), the presence of pruritus, reaction temperature, increase in liver palpation and percussion, the presence of palpable education of the head of pancreas, palpation of enlarged gall bladder, presence of ascites by percussion of the abdominal cavity; to determine the differential diagnostic tactics of malignant and benign diseases of the pancreas and bile ducts and to determine the diagnostic algorithm of tumors of the pancreas and bile ducts: ultrasonic tomography, gastroduodenoscopy, computed tomography, percutaneous transhepatic and retrograde endoscopic cholangiography cholangiography, angiohemophilia, blood tests for tumor markers CA-19-9, the methods of morphological verification of diagnosis: Cytology of bile, percutaneous biopsy of the tumor under ultrasound or CT, duodenoscope, andohahela percutaneous biopsy, biochemical blood tests and hepatobiliscintigraphy for assessment of the functional state of hepatocytes and hepatocentre for assessment of the functional state of the reticuloendothelial system;

- in case of malignant lesions of the liver, to determine the main clinical syndromes (hepatomegaly, icteric, ascitic,

febrile, acute abdominal, painful); palpation detect an increase in the liver, the presence of nodules in the liver parenchyma, the presence of ascites with percussion, an enlarged spleen; to determine the diagnostic algorithm for instrumental diagnosis of liver tumors (ultrasound and computed tomography, laparoscopy, percutaneous tumor biopsy, angiography, blood tests for tumor markers - alpha-fetoprotein, biochemical blood tests);

1. To analyze the results of special methods of research in the diagnosis of tumors of various localizations:

- laboratory blood tests
- radioimmune blood tests
- X-ray diagnostic methods
- endoscopic research methods
- ultrasound research methods
- magnetic resonance imaging
- radioisotope diagnostic methods
- methods of functional diagnostics

2. Based on the obtained physical and instrumental diagnostic methods, determine the stage of the tumor process, its prevalence (TNM).

3. To draw up a radical and palliative treatment plan based on the results of diagnostics.

To possess:

1. Methods of collecting information on malignant manifestations of oncological diseases
2. Proper medical records;
3. Assessments of the public health;
4. Methods of General clinical examination, interpretation of laboratory and instrumental methods of diagnosis, algorithm of the clinical diagnosis, provisional diagnosis with the subsequent direction of the patient to the appropriate specialist.

- 5.. a Consolidating indicators characterizing the degree of development of health Economics, methodology of calculation of indicators of medical statistics;
6. Basic medical diagnostic and therapeutic measures to provide medical care in emergency and life-threatening conditions.
7. Knowledge about epidemiological and statistical data on malignant tumors
8. Knowledge of the clinical and laboratory manifestations of tumor
9. Interpretation of results of instrumental methods of diagnostics of malignant tumors, determining the prevalence of cancer, allowing correct diagnosis in the early stage of the disease.
10. Make a plan for radical and palliative treatment on the basis of results of morphological and instrumental diagnosis
11. To have knowledge about resuscitation in patients with malignant tumors in the early postoperative period and possible complications.
12. Knowledge about monitoring patients with malignancies, allowing to identify early processes of resumption of tumor growth

4. Volume of discipline and types of study

General credit value of the discipline is 3 credit units.

Type of study load	Total hours	Semesters			
		12			
Class hours (total)	85	85			
Include:	-	-	-	-	-
<i>Lectures</i>	85	85			
<i>Practical training (PT)</i>					
<i>Seminars (S)</i>					
<i>Laboratory research (LR)</i>					
Of these, in interactive form:	10	10			
Independent work (total)	23	23			
Including:	-	-	-	-	-
Course project					
Settlement and graphic works					
Abstract					
Other types of independent work					
Work with patients in the department, the study of case histories, participation in the diagnosis of supervised patients	23	23			
Type of intermediate certification (test, exam)	test				
Total labor input	hours	108	108		

Credit Unit	3	3			
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5. Content of the discipline

5.1. The content of the discipline sections

№ п/п	Name of the section of discipline	Contents of the section
1.	Lung Cancer	Statistics, epidemiology and modern diagnostics of lung cancer. Surgical, combined and complex treatment of lung cancer. Rehabilitation of lung cancer patients after treatment, monitoring and treatment of disease recurrence
2.	Stomach Cancer	Statistics, epidemiology and modern diagnostics of stomach cancer. Surgical, combined and complex treatment of gastric cancer. Rehabilitation of patients with gastric cancer after treatment, monitoring and treatment of disease recurrence
3.	Breast cancer	Statistics, epidemiology and modern diagnostics of breast cancer. Surgical, combined and complex treatment of breast cancer. Rehabilitation of patients with breast cancer after treatment, monitoring and treatment of disease recurrence
4.	Colon cancer	Statistics, epidemiology and modern diagnostics of colon cancer. Surgical, combined and complex treatment of colon cancer. Rehabilitation of colon cancer patients after treatment, monitoring and treatment of disease recurrence
5.	Skin cancer, melanoma	Statistics, epidemiology and modern diagnostics of skin cancer and melanoma. Surgical, radiation, laser treatment of skin cancer and melanoma. Rehabilitation of patients with skin cancer and melanoma after special treatment, monitoring and treatment of disease recurrence
6.	Esophageal cancer	Statistics, epidemiology, and current diagnosis of esophageal cancer. Surgical, combined and complex treatment of cancer of the esophagus. Rehabilitation of patients with cancer of the esophagus after treatment, monitoring and treatment of relapses
7.	Thyroid cancer	Statistics and epidemiology current diagnosis of thyroid cancer. Surgical, combined treatment of thyroid cancer. Rehabilitation of patients with thyroid cancer after treatment, monitoring and treatment of relapses
8.	Lymphoma	Limfогranulomatoz Statistics, epidemiology and modern diagnosis of malignant limfom. Modern chemoradiotherapy of malignant lymphomas. Rehabilitation of patients with malignant lymphoma after treatment, monitoring and treatment of relapses
9.	Pancreatobiliary cancer	Statistics, epidemiology and modern diagnosis of pancreatic cancer, extrahepatic bile Protocol and a large duodenal nipple. Surgical, combined and complex treatment .Rehabilitation of

		patients after treatment, monitoring and treatment of relapses
10.	Liver cancer	Statistics, epidemiology and modern diagnosis of liver cancer. Surgical and complex treatment of liver cancer. Rehabilitation of patients with liver cancer after treatment, monitoring and treatment of relapses
11.	Radiation therapy of malignant tumors	Modern radiation therapy of malignant zabolivani person. The types of radiation. Their characteristics. Methods of radiation therapy. Combined and complex treatment of Complications of radiotherapy
12.	Drug therapy of malignant tumors. Offset.	Modern drug therapy. Groups of chemotherapy drugs, enzymes, vaccines, hormones. Private chemotherapy for various human malignant diseases. Complications.

5.2. Sections of disciplines and types of classes

№ п/п	Name of the section of discipline	<i>L</i>	<i>PC</i>	<i>LR</i>	<i>S</i>	Ssgw	Total hours
1.	Lung cancer		8		1	3	11
2.	Stomach cancer		7		1	2	9
3.	Mammary cancer		8		1	2	10
4.	Colon cancer		7		1	2	9
5.	Skin cancer, melanoma		7		1	2	9
6.	Esophageal carcinoma		7		1	2	9
7.	Thyroid cancer		7			1	8
8.	Lymphoma, lymphogranulomatosis		6		1	2	8
9.	Pancreatobiliary cancer		7		1	2	9
10.	Liver cancer		7		1	1	8
11.	Radiotherapy of malignant tumors		7		1	2	9
12.	Drug therapy of malignant tumors. Test		7			2	9
	Total:		85		8	23	108

5.3. Description of interactive classes

№ п/ п	№ discipline section	Subject of a practical training (seminars)	Type of occupation	Workload (hours)
1.	1	The value of computed tomography in the diagnosis	ws	1
2.	2	Early diagnosis of gastric cancer	ws	1

3.	3	Genetic predisposition	ws	1
4.	4,5	Risk factors	ws	2
5.	6	Endoscopic surgery	ws	1
6.	6	Esophagoplasty	ws	1
7.	8	Immunobiochemical diagnosis	ws	1
8.	9	Draining intervention	ws	1
9.	11	Modern boosters	ws	1

7. Practical training (seminars)

№ п/п	№ discipline section	Themes of practical training (seminars)	Workload (hours)
1.	1.	Lung cancer	
2.	2.	Stomach cancer	
3.	3.	Mammary cancer	
4.	4.	Colon cancer	
5.	5.	Skin cancer, melanoma	
8.	8.	Esophageal carcinoma	
7.	7.	Thyroid cancer	
8.	8.	Lymphoma, lymphogranulomatosis	
9.	9.	Pancreatobiliary cancer	
10.	10.	Liver cancer	
11.	11.	Radiotherapy of malignant tumors	
12.	12.	Drug therapy of malignant tumors. Test.	
		Total	85

8. Material and technical support of the discipline:

Radiographic studies: x-ray of lungs, x-rays of the gastrointestinal tract, radiography of the skeletal system, angiography.

Radioisotope laboratory: bone scan, hepatobiliscintigraphy, radioisotope skanirovanie kidney and thyroid gland, radioisotope scanning of the lungs and brain.

Endoscopy lab: fibrogastroduodenoskopiya, bronchoscopy, colonoscopy, cystoscopy, laparoscopy, choledochoscopy.

Laboratory multislice computed tomography.
 Magnetic resonance imaging
 Laboratory: ultrasonic imaging of soft tissue, abdominal cavity, retroperitoneal space, kidneys and bladder. Doppler.
 Laboratory of pathology: Cytology, histology. Electron microscopy.
 The breast laboratory.
 Computer system for training students and carrying out test control.
 Surgical operating (6 operational)
 Laboratory radiation therapy: radiotherapy, gamma-ray therapy, irradiation by particle accelerators, laboratory intracavitary therapy.
 Four laboratories for practical training
 A lecture hall.
 Slides, videofilm, posters, tables, pictures on all areas of Oncology.

9. Information support of the discipline:

a) software obespechenie

Presentation of lectures and laboratory classes on the disciplines

Tests for learning and knowledge control

b) a database, directory and search engine

1. ISBN 978-5-9704-1249-7

2. ISBN 978-5-8948-1676-0

3. ISBN 978-5-9704-0676-2

10. Training and methodological support disciplines:

a) primary literature

1. Oncology (textbook for medical schools)

Edited by S. B. Peterson of Moscow. GOATER-Media 2017,-288C. ISBN 978-5-9704-4070-0

2. Guide to practical training in Oncology , sh X Ghanaians,2007,Moscow, MIA.

3. Manual of Oncology, edited by V. I. Chissov. 2008 MIA, 835 p. ISBN 978-5-8948-1676-4

4. General questions of clinical Oncology. Moscow, peoples ' friendship University textbook. N. In. Kharchenko and co-authors, 2018 41C. ISBN 978-5-209-08360-3

5. Oncology .Tutorial. V. G. Cherenkov. 2017. Heater Media ISBN 978-5-9704-4091-9

6. Radiation therapy (radiotherapy): the Textbook / Under the editorship of G. E. Trufanova Moscow. ISBN 978-5-9704-442--7

GOATER Media. 2018-208 S.

b) additional resources

1. Cancer of the stomach in questions and answers (textbook) Moscow., Peoples ' friendship University, 1999.

2. Esophageal cancer questions and answers (textbook) Moscow., Peoples ' friendship University, 1999

3. Breast cancer questions and answers (textbook) Moscow., PFUR, 2000.

4. Lung cancer questions and answers (textbook) Moscow., PFUR, 2007.

5. Thyroid cancer questions and answers (textbook) Moscow., People's friendship University, 2008.

6. Limfogranulomatoz in questions and answers (textbook) Moscow., People's friendship University, 2008.

7. Cancer of the skin. Melanoma questions and answers (textbook) Moscow., People's friendship University, 2008.
8. . Cancer of the pancreas, bile ducts and major duodenal nipple in questions and answers (textbook) Moscow., People's friendship University, 2009.
9. Colon cancer questions and answers (textbook) Moscow., PFUR, 2011.
10. . Basic principles of chemotherapy of malignant neoplasms (textbook) Moscow, PFUR, 2014. ISBN 978-5-209-05917-2

11. Guidelines for students on the development of the discipline (module)

Students are required to attend classes, complete teacher assignments, familiarize themselves with recommended literature, etc. When assessing a student, the quality of the work in the classroom, the level of preparation for independent activities in the chosen field, the quality of the teacher's assignments, and the ability to independently study the teaching material are assessed.

At practical classes in the classrooms, the relevant topics are analyzed using multimedia technology (computer, projector).

Independent work in extracurricular hours can take place both in the classrooms of the department and the computer classroom, where students can study the material on presentations prepared by the department teachers, as well as on computer tests.

Extracurricular independent work includes:

study of the material on the textbook, textbooks on paper and electronic media; preparation of abstract messages on the chosen topic; preparation for the performance of tests and tests.

Requirements for the abstract: relevance of the topic, compliance with the content of the topic, the depth of study of the material, the correctness and completeness of the use of sources, compliance with the design of the essay standards.

For training and self-training the following method is used. Developments:

1. Stomach cancer in questions and answers (Teaching aid) Moscow., RUDN, 1999.
2. Cancer of the esophagus in questions and answers (Teaching aid) Moscow., RUDN University, 1999
3. Breast cancer in questions and answers (Teaching aid) Moscow., RUDN, 2000.
4. Cancer of the lung in questions and answers (Teaching aid) Moscow., RUDN, 2007.
5. Thyroid cancer in questions and answers (Teaching aid) Moscow., RUDN, 2008.
6. Lymphogranulomatosis in questions and answers (Teaching aid) Moscow., RUDN, 2008.
7. Skin cancer. Melanoma in questions and answers (Teaching aid) Moscow., RUDN, 2008.
- eight. . Cancer of the pancreas, bile ducts and the large duodenal papilla in questions and answers (Teaching aid) Moscow., RUDN, 2009.
9. Colon cancer in questions and answers (Teaching aid) Moscow., RUDN, 2011.
- ten. . The main principles of chemotherapy of malignant neoplasms (teaching aid) Moscow, RUDN University, 2014.

12. Fund of estimated means for the interim assessment of students in the discipline (module)

The current control of knowledge and success of mastering the curriculum is carried out in the form of an oral survey or computer testing during practical exercises.

Boundary control of knowledge is carried out at least once a semester. Conducted by test control, supplemented at the discretion of the teacher by oral interview. In the process of control, the student must show his knowledge of the completed sections of the discipline, skills and abilities. Also monitored for attending practical classes. The assessment of knowledge is carried out according to the credit / neglect system; during testing, the credit rating is given with the correct answer to 70% or more of the questions.

A student who has fully completed the discipline curriculum is admitted to the final certification for the discipline. The final attestation is carried out through oral interviews and testing: the student is offered a test containing 10 questions on the main topics of the discipline with different answers, the test is considered to be successfully passed with the correct answer to 7 or more questions.

Score structure:

1. The implementation of the curriculum for the discipline: visiting practical classes, studying the topics recommended for self-study; writing and protection of the abstract, the results of current and midterm knowledge control - up to 49% of points.

2. Final oral interview - up to 51% of points.

12.1. Point-rating system (PRS) assessment of students' knowledge in the discipline oncology

Table 2. The distribution of points for the semester and the calculation of the final grade

№ modul	Name of model	Unsat	Satis	Good	Exell
1	Lung cancer 11 hours (0.3 credit) Including If	0-3 score	Or 1,9-3,45 score	2,72-4,19 score	3,27-4,54 score
2	Stomach cancer 9 hours (0.27 credit) Including If	0-3 score	Or 1,9-3,45 score	2,72-4,19 score	3,27-4,54 score
3	Colon cancer 9 hours (0.27 credit) Incl. If	0-3 score	Or 1,9-3,45 score	2,72-4,19 score	3,27-4,54 score
4	Cancer of the esophagus 9 hours (0.27 credit) Incl. If	0-3 score	Or 1,9-3,45 score	2,72-4,19 score	3,28-4,54 score
5	Breast cancer 10 hours (0.29 credit) Incl. If	0-3 score	Or 2,0-3,45 score	2,72-4,19 score	3,27-4,55 score
6	Thyroid cancer 8 hours (0.25 credit)	0-3 score	Or 1,9-3,45 score	2,72-4,19 score	3,28-4,54 score
7	Malignant lymphomas 8 hours (0.25 credits) Incl. If	0-3 score	Or 1,9-3,45 score	2,72-4,19 score	3,27-4,55 score
8	Skin cancer. Melanoma 9 hours (0.27 credit)	0-3 score	Or 1,9-3,45 score	2,72-4,19 score	3,28-4,54 score
9	Cancer of the pancreas, bile ducts and large duodenal papilla 9 hours (0.27)	0-3 score	Or 1,9-3,45	2,72-4,19 score	3,27-4,54 score

	credit) Incl. If		score		
10	Liver cancer 8 hours (0.25 credit)	0-3 score	От 1,9-3,45 score	2,72-4,19 score	3,28-4,54 score
11	Beam treatment of malignant tumors 9 hours (0.27 credit) Incl. If	0-3 score	От 1,9-3,45 score	2,72-4,19 score	3,27-4,55 score
12	Drug treatment of malignant tumors 9 hours (0.27 credit)	0-3 score	От 1,9-3,45 score	2,72-4,19 score	3,27-4,55 score
ИТОГО	108 hours 3 credit	0-50 БАЛЛОВ	51-68 score	69-85 score	86-100 score

Criteria for evaluation

Table 3. The final grade in the table is set in the student book

Points of PRS	Traditional evaluation in the Russian Federation	Points to transfer grades	Ratings	Ratings ECTS
86 - 100	5	95 - 100	5+	A
		86 - 94	5	B
69 - 85	4	69 - 85	4	C
51 - 68	3	61 - 68	3+	D
		51 - 60	3	E
0 - 50	2	31 - 50	2+	FX
		0 - 30	2	F

Description of ratings ECTS:

A ("Excellent") - theoretical course content mastered completely, with no gaps, necessary practical skills of work with the mastered material are formed, the training program learning tasks fulfilled, the quality of their performance assessed by the number of points close to maximum.

B ("Very good") - theoretical content of the course is mastered completely, without gaps, the necessary practical skills mastered, all provided by the training program learning tasks performed, the quality of most of them estimated the number of points close to maximum.

C ("Good") - theoretical content of the course is mastered completely, without gaps, some practical skills mastered the material not perfectly, all provided by the training program learning tasks fulfilled, the quality of performance none estimated with minimum number of points, some types of tasks completed with errors.

D ("Satisfactory") - theoretical content of the course is mastered partially, but gaps are not

essential character, necessary practical navigatable with mastered material basically formed, most provided by the training program learning tasks fulfilled, performing some assignments may contain errors.

E ("Mediocre") - theoretical course content mastered in part, some practical skills are not formed, the many learning tasks are not fulfilled, or the quality of some of them estimated the number of points close to the minimum.

FX ("Conditionally unsatisfactory") - theoretical course content mastered in part, the necessary practical skills of work are not formed, most provided by the training program learning tasks are not fulfilled or the quality of their performance assessed by the number of points close to minimum; with additional individual work on the course material may increase the quality of performance of educational tasks.

F ("Definitely poor") - theoretical course content mastered, the necessary practical skills of work are not formed, all fulfilled tasks contain gross errors, additional independent work on course material will not result in any meaningful increase of learning tasks quality.

The program is compiled in accordance with the requirements of the FSES HE.

Developers:

Associate Professor
of the Department of Oncology and Roentgen-Radiology Kunda M.A.

Associate Professor
of the Department of Oncology and Roentgen-Radiology Zapirov G.M.

Head of the Department of Oncology and Roentgen-Radiology Kaprin A.D.

Head of the Program **Radysh I.V.**