

F-Work program of the discipline

by the decision of the Academic Council of the USU I nstitute of Medicine, Ecology and Physical Culture 16.05.2024 Record No. 9/260

Chairman

Mashin V.V

(Signature, Name)

«16» 05 2024

#### **EDUCATIONAL PLAN**

Subject:	Modern aspects of oncology	
Faculty	Medical	
Department	Oncology and radiation diagnostics im. O.P. Modnikova	
Course	6	

#### Speciality 31.05.01. «General medicine»

(code of the speciality, full name)

Form of education-full-time education

Date of introducing in the instruction process at USU: « 01 » of September 2024.

The program was updated at the meeting of the department: $N_{\underline{0}}$	of	20
The program was updated at the meeting of the department: №	of	20
The program was updated at the meeting of the department: №	of	20
The program was updated at the meeting of the department: №	of	20
The program was updated at the meeting of the department: №	of	20

#### Information about the authors:

Initials	Department	Position, academic degree, scientific rank
		Head of the Department, Candidate of Medical Sciences,
	radiation diagnostics	Associate Professor
MorozovV.S.	Oncology and	Candidate of Medical Sciences, Associate Professor
	radiation diagnostics	
Matveeva L.V.	Oncology and	Candidate of Medical Sciences, Associate Professor
	radiation diagnostics	

AGREED	AGREED
Head of the department of Oncology and	Head of the graduating department of Hospital therapy
radiation diagnostics im. O.P. Modnikova,	
implementing the discipline	4
Signature   Sharafutdinov M.G.	Signature  «16» 05 2024



#### F-Work program of the discipline

#### 1. GOALS AND OBJECTIVES OF LEARNING THE DISCIPLINE:

#### **Objectives of mastering the discipline:**

- the formation of ideas about palliative care as a complex of medical interventions aimed at relieving pain and alleviating other severe manifestations of the disease, in order to improve the quality of life of incurable patients;
- creating students' understanding of palliative care as an integral part of the health care system.
- teaching students the knowledge and skills that contribute to ensuring the highest possible quality of life for every incurable patient and his family members.

#### Objectives of mastering the discipline:

- to obtain systematized theoretical knowledge on the etiology, clinic, methods of treatment and prevention of the main clinical problems of terminally ill patients, taking into account the profile of the underlying disease and key aspects of palliative medicine: somatic (including treatment of chronic pain ), psychosocial (including the art of communication and correction of grief reactions), cultural and ethical.
- to acquire practical skills and abilities necessary for future independent professional activities.

#### 2. PLACE OF DISCIPLINE IN THE STRUCTURE OF OPOP:

Discipline "Modern aspects of oncology "refers to the Block of disciplines for choosing a curriculum for the direction of training "General Medicine".

The teaching of palliative medicine is based on the knowledge gained during the study of the following disciplines:

Propedeutics of internal diseases PC-2

General surgery. Introduction to the specialty PC-2

Pathological anatomy PC-2

Dentistry PC-2

Dermatovenerology PC-2

Neurology, medical genetics. neurosurgery PC-2

Otorhinolaryngology PC-2

Pediatrics PC-2

Faculty surgery PC-2

Obstetrics and gynecology PC-2

Faculty therapy PC-2

Ophthalmology PC-2

Occupational diseases PC-4

Psychiatry, medical psychology PC-2

Endocrinology PC-2

Hospital therapy PC-2

Infectious diseases PC-2

Traumatology, orthopedics PC-2

Hospital surgery, pediatric surgery PC-2

Phthisiology PC-2

Forensic medicine PC-2

Oncology, radiation therapy PC-2

Radiation diagnostics PC-2

Analysis of scientific text (obstetrics) PC-2

Medical rehabilitation PC-4

Topical issues of gynecology PC-2

Modern aspects of oncology PC-2; PC-4

Elective disciplines in physical culture and sports PC-4

Practice for obtaining primary professional skills and abilities of a doctor in an inpatient institution PC-4

Ministry of Science and Higher Education of the Russian Federation Ulyanovsk State University	The form	
F-Work program of the discipline		

Dialogue between a doctor and a patient (diseases of the gastrointestinal tract) PC-2

Topical issues of internal diseases PC-2

Urology and Andrology PC-2

Preparation for clinical practice PC-2

Analysis of scientific text (gynecology) PC-2

Dialogue between a doctor and a patient (diseases of the excretory system) PC-2

Diagnostics and treatment of extrapulmonary tuberculosis PC-2; PC-4

Surgical gastroenterology and endoscopy PC-2

Analysis of scientific text (therapy) PC-2

Analysis of scientific text (surgery) PC-2

Dialogue between a doctor and a patient (diseases of the cardiovascular system) PC-2

Dialogue between a doctor and a patient (diseases of the respiratory system) PC-2

Topical issues of HIV infection PC-2

Clinical electrocardiography PC-2

Therapeutic patient care PC-2

Junior medical staff assistant PC-2

Familiarization practice PC-2

Ward nurse Assistant PC-2

Nurse assistant **PC-2** 

Practice for obtaining professional skills and professional experience in the positions of paramedical personnel PC-2

Diagnostic practice PC-2

Inpatient physician assistant PC-2

Practice for obtaining primary professional skills and abilities of a doctor in an inpatient institution **PC-4**Practical application of the International classification of functioning in rehabilitation for various pathologies **PC-4** 

Preparation and passing of the state exam PC-2; PC-4

# 3. LIST OF PLANNED LEARNING OUTCOMES ON THE DISCIPLINE (MODULE), CORRELATED TO THE PLANNED OUTCOMES OF THE BASIC PROFESSIONAL EDUCATIONAL PROGRAM

Code and name of the implemented competence	The list of planned learning outcomes for the
	discipline (module), correlated with indicators
	of achievement of competencies
PC-2	Know: diagnostic methods, diagnostic
(readiness to collect and analyze patient complaints, data from	capabilities of methods of direct examination of
his anamnesis, examination results, laboratory, instrumental,	a patient of a therapeutic, surgical and obstetric-
μ υ ΄	gynecological profile; modern methods of
a condition or establish the presence or absence of a disease)	clinical, laboratory, instrumental examination of
	patients (including endoscopic, radiological
	methods, ultrasound diagnostics).
	Be able to: determine the patient's status - collect
	anamnesis, interview the patient and / or his
	relatives, conduct a physical examination of the
	patient (examination, palpation, auscultation);
	conduct a primary examination of systems and
	organs: respiratory, cardiovascular, blood and
	hematopoietic organs, digestive, endocrine and
	urinary; outline the volume of additional studies

Ministry of Science and Higher Education of the Russian Federation Ulyanovsk State University	The form	
F-Work program of the discipline		

	in accordance with the prognosis of the disease, to clarify the diagnosis and obtain a reliable result.
	Possess: methods of general clinical objective examination (questioning, examination.
	palpation, percussion, auscultation) for diseases of internal organs; interpretation of the results of
	laboratory, instrumental diagnostic methods for
	pathology of internal organs.
PC -4	Know: ways of administering drugs to patients
(readiness to determine the need to use natural healing factors,	with various diseases in need of medical
drug, non-drug therapy and other methods in patients in need of	rehabilitation and spa treatment.
	Be able to: apply various methods of
•	administering drugs to patients with various
	diseases in need of medical rehabilitation and spa
	treatment.
	Possess: the skills of using different methods of
	administering drugs in a sanatorium-resort
	environment in patients in need of medical
	rehabilitation and spa treatment.

## TOTAL EMPLOYMENT OF THE DISCIPLINE

	Number of hours (form of study full- time)_			
Type of educational work	Total according to plan	Incl. by semester		
		eleven		
1	2	3		
Contact work of students with the teacher in accordance with the UP	32	32		
Auditory lessons:	32	32		
lectures	-	-		
Seminars and workshops	32	32		
laboratory works, workshops	-	-		
Independent work	40	40		
Form of current control of knowledge and control	Oral survey, testing	Oral survey, testing		
independent work:				
Course work	-	-		
Types of intermediate certification (exam, test)	offset	offset		
Total hours by discipline	72	72		

## 4.3. Content of the discipline (module.) Distribution of hours by topics and types of academic work:

Form of study full-time

			Types of training				Knowledge
Title and sections and	Takal	A	uditory les	sons	T44		current control
topics	Total		practical	laboratory	Interactive	Independent	form
-		lectures	training,	work	classes	work	

Ministry of Science and Higher Education of the Russian Federation Ulyanovsk State University

Methods for the treatment of

pharmacotherapy. Classifica

cancer

of

chronic pain in

analgesics. Analgesics

patients. Systemic

tion

The form



F-Work program of the discipline seminar 2 3 7 4 five 6 8 Section 1. Organizational and methodological approaches to palliative care 1. Introductory lesson. The 10 Oral survey, principles and philosophy of testing palliative care. Purpose and possibilities of palliative care. The work of the "team". Features of supervision of incurable patients. Patient cancer quality of life: definition, key indicators, ways improve. Choice of palliative care tactics. General questions of the organization of palliative care. Organization of inpatient and outpatient care. Medical and economic standards for palliative care. Section 2. Provision of palliative care 2. Diagnostics and treatment 10 Oral survey, of chronic pain syndrome of testing oncological genesis. Definition reasons. Pathophysiological mechanisms. Classification of chronic pain. Diagnostics of the chronic pain syndrome. Quantification of pain intensity (algometry, analgesimetry). Anamnesis of chronic pain syndrome, physical neuropsychiatric status the patient. Principles chronic pain treatment determining the causes of chronic pain, choosing a treatment method. evaluating the effectiveness and tolerability treatment.

Ministry of Science and Higher Education of the Russian Federation Ulyanovsk State University	The form	<b>M</b>
F-Work program of the discipline		

r-work	program of the	e discipilile					
peripheral action:							
<u> </u>							
mechanism of action, side							
effects. Central-acting							
analgesics. Classification							
and mechanism of action of							
opioids. Analgesic potential							
and side effects of different							
classes of							
opioids. Tolerance, physical							
and mental							
dependence. Non-opioid							
analgesics. Classification							
and mechanism of							
action. Adjuvant and							
symptomatic agents.				 			
3. Diagnostics and	27		12	 -	15	Oral survey	γ,
correction of homeostasis						testing	
disorders in cancer							
patients. Etiology and							
pathogenesis of homeostasis							
disorders in cancer							
patients. Distribution and							
generalization of the							
primary tumor							
process. Special antitumor							
treatment (surgical,							
radiation, drug), palliative							
care place in case							
management. The main links							
in the pathogenesis of							
homeostasis disorders,							
which determine the							
condition of patients and the							
severity of pathological							
symptoms. Leading clinical							
syndromes. Methods for							
correcting homeostasis							
disorders in cancer							
patients. Pharmacotherapy							
of disorders of homeostasis							
in cancer patients.							
Specific disorders of							
homeostasis in patients with							
common forms of malignant							
neoplasms:							
respiratory and							
cardiovascular disorders,							
endocrine and metabolic							
disorders, neurological and							
urological disorders,							

o i j un	io voir o terr	e em energ				
F-Work	program o	f the discipline				
musculoskeletal and trophic						
disorders.  Diagnostics and correction						
of mental disorders in cancer						
patients						
Fundamentals of psycho- and pharmacotherapy in						
patients with common forms						
of malignant neoplasms						
4. Ethics and deontology in the provision of palliative	10		5		5	Oral survey, testing

The form

40

Ministry of Science and Higher Education of the Russian Federation

Ulvanovsk State University

# questions. Psychological reactions to the loss of loved ones. Grief. The process of experiencing. Psychological risk groups (children, adolescents, healthcare workers). Attitude towards euthanasia.

care. Psychological,

palliative

Total

spiritual aspects

care . Communication with terminally ill patients and their families. Breaking bad news to parents. Ability to listen to the patient. Ability

## CONTENT OF THE DISCIPLINE (MODULE)

32

#### Section 1. Organizational and methodological approaches to palliative care.

72

**Topic 1.** Introductory lesson. The principles and philosophy of palliative care. Topic content: Purpose and possibilities of palliative care. The work of the "team". Features of supervision of terminally ill patients. Patient quality of life: definition, key indicators, ways to improve. Choice of palliative care tactics. General issues of organizing palliative care (foreign and domestic experience, organizational structure of the palliative care system for cancer patients in Russia). Organization of inpatient and outpatient care. Medical and economic standards for palliative care. Medical rehabilitation of patients with oncological diseases.

#### Section 2. Provision of palliative care.

**Topic 2.** Diagnostics and treatment of chronic pain syndrome of oncological genesis. Content of the topic: Definition and causes of chronic pain syndrome. Pathophysiological mechanisms. Classification of chronic pain. Diagnostics of the chronic pain syndrome. Quantification of pain intensity (algometry, analgesimetry). Anamnesis of chronic pain syndrome, physical and neuropsychiatric status of the patient. Principles of chronic pain treatment - identifying the causes of chronic pain, choosing a treatment method, evaluating the effectiveness and tolerability of treatment. Methods for the treatment of chronic pain in cancer patients. Systemic pharmacotherapy. Classification of analgesics. Analgesics of peripheral action: mechanism of action, side effects. Central-acting analgesics. Classification and mechanism of action of opioids. Analgesic potential and side effects of different classes of opioids. Tolerance, physical and mental

Ministry of Science and Higher Education of the Russian Federation Ulyanovsk State University	The form	<b>M</b>
F-Work program of the discipline		

dependence. Non-opioid analgesics. Classification and mechanism of action. Adjuvant and symptomatic agents.

**Topic 3.** Diagnostics and correction of homeostasis disorders in cancer patients. Content of the topic: Etiology and pathogenesis of homeostasis disorders in cancer patients. Distribution and generalization of the primary tumor process. Special antitumor treatment (surgical, radiation, drug), palliative care place in case management. The main links in the pathogenesis of homeostasis disorders, which determine the condition of patients and the severity of pathological symptoms. Leading clinical syndromes. Methods for correcting homeostasis disorders in cancer patients. Pharmacotherapy of disorders of homeostasis in cancer patients.

Specific disorders of homeostasis in patients with common forms of malignant neoplasms: respiratory and cardiovascular disorders, endocrine and metabolic disorders, gastrointestinal disorders, neurological and urological disorders, musculoskeletal and trophic disorders. Diagnostics and correction of mental disorders in cancer patients. Fundamentals of psycho- and pharmacotherapy in patients with common forms of malignant neoplasms.

**Topic 4.** Ethics and deontology in the provision of palliative care. Content of the topic: Psychological, social and spiritual aspects of palliative care. Communication with terminally ill patients and their families. Breaking bad news. Ability to listen to the patient. Ability to ask questions. Psychological reactions to the loss of loved ones. Grief. The process of experiencing. Psychological risk groups (children, adolescents, healthcare workers). Attitude towards euthanasia.

#### 6. TOPICS OF PRACTICAL AND SEMINAR LESSONS

Section 1. Organizational and methodological approaches to palliative care.

## Topic 1. Introductory lesson. The principles and philosophy of palliative care. Questions on the topics of the section:

- 1. Purpose and possibilities of palliative care. The work of the "team".
- 2. Features of supervision of terminally ill patients.
- 3. Patient quality of life: definition, key indicators, ways to improve.
- 4. Choice of palliative care tactics.
- 5. General issues of organizing palliative care (foreign and domestic experience, organizational structure of the palliative care system for cancer patients in Russia).
- 6. Organization of inpatient and outpatient care.
- 7. Medical and economic standards for palliative care.
- 8. Medical rehabilitation of patients with oncological diseases.

#### Section 2. Provision of palliative care.

#### Topic 2. Diagnostics and treatment of chronic pain syndrome of oncological genesis.

#### Questions on the topics of the section:

- 1. Definition and causes of chronic pain syndrome.
- 2. Pathophysiological mechanisms. Classification of chronic pain.
- 3. Diagnostics of the chronic pain syndrome.
- 4. Quantification of pain intensity (algometry, analgesimetry).
- 5. Anamnesis of chronic pain syndrome, physical and neuropsychiatric status of the patient.
- 6. Principles of chronic pain treatment identifying the causes of chronic pain, choosing a treatment method, evaluating the effectiveness and tolerability of treatment.
- 7. Methods for the treatment of chronic pain in cancer patients.
- 8. Systemic pharmacotherapy.
- 9. Classification of analysics.
- 10. Analgesics of peripheral action: mechanism of action, side effects.
- 11. Central-acting analgesics.
- 12. Classification and mechanism of action of opioids.
- 13. Analgesic potential and side effects of different classes of opioids. Tolerance, physical and mental dependence.

Ministry of Science and Higher Education of the Russian Federation Ulyanovsk State University	The form	<b>M</b>
F-Work program of the discipline		

- 14. Non-opioid analgesics. Classification and mechanism of action.
- 15. Adjuvant and symptomatic agents.

# Topic 3. Diagnostics and correction of homeostasis disorders in cancer patients. Questions on the topics of the section:

- 1. Etiology and pathogenesis of homeostasis disorders in cancer patients.
- 2. Distribution and generalization of the primary tumor process.
- 3. Special antitumor treatment (surgical, radiation, drug), palliative care place in case management.
- 4. The main links in the pathogenesis of homeostasis disorders, which determine the condition of patients and the severity of pathological symptoms.
- 5. Leading clinical syndromes.
- 6. Methods for correcting homeostasis disorders in cancer patients.
- 7. Pharmacotherapy of disorders of homeostasis in cancer patients.
- 8. Specific disorders of homeostasis in patients with common forms of malignant neoplasms: respiratory and cardiovascular disorders, endocrine and metabolic disorders, gastrointestinal disorders, neurological and urological disorders, musculoskeletal and trophic disorders.
- 9. Diagnostics and correction of mental disorders in cancer patients
- 10. Fundamentals of psycho- and pharmacotherapy of patients with common forms of malignant neoplasms.

# Topic 4. Ethics and deontology in the provision of palliative care. Questions on the topics of the section:

- 1. Psychological, social and spiritual aspects of palliative care.
- 2. Communication with terminally ill patients and their families. Breaking bad news.
- 3. Ability to listen to the patient. Ability to ask questions.
- 4. Psychological reactions to the loss of loved ones.
- 5. Grief. The process of experiencing.
- 6. Psychological risk groups (children, adolescents, healthcare workers).
- 7. Attitude towards euthanasia.

#### 7. LABORATORY WORKS, PRACTICE

This type of work is not provided for by the EP

#### 8. TOPICS OF COURSE, CONTROL WORKS, ABSTRACTS

This type of work is not provided for by the EP

#### 9. LIST OF QUESTIONS FOR CREDIT

- 1. Give the definition of palliative care.
- 2. What institutions provide palliative care to patients in the Russian Federation?
- 3. What are the main tasks and functions of institutions providing palliative care?
- 4. What is the purpose of palliative care units?
- 5. What is hospice? What is the purpose of creating hospices?
- 6. The main functions, structural units and methods of hospice work.
- 7. What is the continuity between doctors of various specialties who provide palliative care to patients and who are in contact with their family members?
- 8. List the factors that determine the quality of life of patients in need of palliative care.
- 9. The most common painful symptoms in patients requiring palliative care. Principles of relief of painful symptoms.
- 10. Chronic pain syndrome: definition, types of pain, diagnosis. Modern approaches to chronic pain management.
- Palliative care in abdominal oncology: causes of neglect, relief of painful symptoms, organization of care for patients with common forms of malignant neoplasms.

Ministry of Science and Higher Education of the Russian Federation Ulyanovsk State University	The form	<b>(1)</b>
F-Work program of the discipline		

- Palliative care in gynecological oncology: causes of neglect, relief of painful symptoms, organization of care for patients with common forms of malignant neoplasms.
- 13. Palliative care for malignant neoplasms of the mammary glands: causes of neglect, relief of painful symptoms, organization of care for patients with common forms of malignant neoplasms.
- 14. Palliative care in urology oncology: causes of neglect, relief of painful symptoms, organization of care for patients with common forms of malignant neoplasms.
- 15. "Burnout syndrome" in palliative care providers. Prevention of this syndrome.
- 16. Ethics and deontology in the provision of palliative care.

#### 10. **INDEPENDENT WORK OF STUDENTS**

Form of study full-time

Title of sections and topics	Independent work type	Volume in	form of control
		hours	
Section 1. Organizational and	study of educational	10	oral questioning, testing
methodological approaches to palliative	material,		
care.	preparation for passing the		
	test		
Section 2. Provision of palliative care	study of educational	30	oral questioning, testing
	material,		
	preparation for passing the		
	test		
Total:		40h.	

Ministry of Science and Higher Education of the Russian Federation	The form	
Ulyanovsk State University		
F-Work program of the discipline		

# 11. УЧЕБНО-МЕТОДИЧЕСКОЕ И ИНФОРМАЦИОННОЕ ОБЕСПЕЧЕНИЕ ДИСЦИПЛИНЫ

#### а) Список рекомендуемой литературы

#### основная

- 1. Trufanov, G. E. Diagnosticradiology :textbook / G. E. Trufanov, R. M. Akiev, K. N. Alekseev [etal.]; ed. G. E. Trufanov. Москва : ГЭОТАР-Медиа, 2021. 444 с. ISBN 978-5-9704-5963-8. Текст : электронный // ЭБС "Консультант студента" : [сайт]. URL : https://www.studentlibrary.ru/book/ISBN9785970459638.html
- 2. Кира, Е. Ф. Thebasicquestionsofoncogynecology Основные вопросы онкогинекологии : учебник на английском и русском языках / Кира Е. Ф. [и др. ]. Москва : ГЭОТАР-Медиа, 2018. 288 с. ISBN 978-5-9704-4565-5. Текст : электронный // ЭБС "Консультант студента" : [сайт]. URL : <a href="https://www.studentlibrary.ru/book/ISBN9785970445655.html">https://www.studentlibrary.ru/book/ISBN9785970445655.html</a>

#### дополнительная:

- 1Каравай А. В. Clinical Oncology in two parts. Part I = Клиническая онкология в двух частях. Часть I : пособие для студентов учреждений высшего образования, обучающихся по специальности 1-79 01 01 «Лечебное дело» : manualforstudentsofhighereducationinstitutionsstudyinginthespecialty 1-79 01 01 «GeneralMedicine» / А. В. Каравай, Г. Г. Божко. Гродно :ГрГМУ, 2018. 304 с. ISBN 9789855589892. Текст : электронный // ЭБС "Букап" : [сайт]. URL : <a href="https://www.books-up.ru/ru/book/clinical-oncology-in-two-parts-part-i-12199149/">https://www.books-up.ru/ru/book/clinical-oncology-in-two-parts-part-i-12199149/</a>
- 2 Хоров А. О. Clinicaltasksinoncology = Клинические задачи по онкологии : пособие для студентов факультета иностранных студентов с английским языком обучения (специальность 1-79 01 01 «Лечебное дело») [на англ. яз.] : hand book for the foreign studentsof the Medical Faculty / А. О. Хоров, А. В. Каравай, К. Н. Угляница. Гродно :ГрГМУ, 2018. 72 с. ISBN 9789855589533. Текст : электронный // ЭБС "Букап" : [сайт]. URL : <a href="https://www.books-up.ru/ru/book/slinical-tasks-in-oncology-12199649/">https://www.books-up.ru/ru/book/slinical-tasks-in-oncology-12199649/</a>
- 3 Antoneeva I. I. Studying oncology: the selected chapters: Tutorial / I. I. Antoneeva; Ulyanovsk State University, Faculty of Medicine. Ulyanovsk: UlSU, 2021. 172 р. На англ. яз.; Загл. сэкрана. URL: http://lib.ulsu.ru/MegaPro/Download/MObject/14450

#### учебно-методическая

- 1. Methodological instructions for preparation for practical studies of students on the discipline «Modern aspects of oncology» for specialty 31.05.01 «General medicine» / M. G. Sharafutdinov, L. V. Matveeva. Ulyanovsk :UlSU, 2022. Неопубликованный ресурс; На англ. яз. URL: <a href="http://lib.ulsu.ru/MegaPro/Download/MObject/11515">http://lib.ulsu.ru/MegaPro/Download/MObject/11515</a>. Режим доступа: ЭБС УлГУ. Текст :электронный.
- 2. Guidelines for independent work of students in the discipline «Modern aspects of oncology» for specialty 31.05.01 «General medicine» / M. G. Sharafutdinov, L. V. Matveeva. Ulyanovsk :UlSU, 2022. Неопубликованный ресурс; На англ. яз. URL: <a href="http://lib.ulsu.ru/MegaPro/Download/MObject/11514">http://lib.ulsu.ru/MegaPro/Download/MObject/11514</a>. Режим доступа: ЭБС УлГУ. Текст :электронный.

#### AGREED:

Leading specialist CTag	цольникова/		2024_
The position of the worker scientific library	Full name	signature	data

#### 1. Электронно-библиотечные системы:

- 1.1. Цифровой образовательный ресурс IPRsmart : электронно-библиотечная система : сайт / ООО Компания «Ай Пи Ар Медиа». Саратов, [2024]. URL: http://www.iprbookshop.ru. Режим доступа: для зарегистрир. пользователей. Текст : электронный.
- 1.2. Образовательная платформа ЮРАЙТ : образовательный ресурс, электронная библиотека : сайт / ООО Электронное издательство «ЮРАЙТ». Москва, [2024]. URL: <a href="https://urait.ru">https://urait.ru</a> . Режим доступа: для зарегистрир. пользователей. Текст : электронный.
- 1.3. База данных «Электронная библиотека технического ВУЗа (ЭБС «Консультант студента») : электронно-библиотечная система : сайт / ООО «Политехресурс». Москва, [2024]. URL: <a href="https://www.studentlibrary.ru/cgi-bin/mb4x">https://www.studentlibrary.ru/cgi-bin/mb4x</a>. Режим доступа: для зарегистрир. пользователей. Текст : электронный.
- 1.4. Консультант врача. Электронная медицинская библиотека: база данных: сайт / OOO «Высшая школа организации и управления здравоохранением-Комплексный медицинский консалтинг». Москва, [2024]. URL: <a href="https://www.rosmedlib.ru">https://www.rosmedlib.ru</a>. Режим доступа: для зарегистрир. пользователей. Текст: электронный.
- 1.5. Большая медицинская библиотека: электронно-библиотечная система: сайт / ООО «Букап». Томск, [2024]. URL: <a href="https://www.books-up.ru/ru/library/">https://www.books-up.ru/ru/library/</a>. Режим доступа: для зарегистрир. пользователей. Текст: электронный.
- 1.6. ЭБС Лань : электронно-библиотечная система : сайт / ООО ЭБС «Лань». Санкт-Петербург, [2024]. URL: https://e.lanbook.com. Режим доступа: для зарегистрир. пользователей. Текст : электронный.
- 1.7. ЭБС Znanium.com : электронно-библиотечная система : сайт / ООО «Знаниум». Москва, [2024]. URL: <a href="http://znanium.com">http://znanium.com</a> . Режим доступа : для зарегистрир. пользователей. Текст : электронный.
- **2. КонсультантПлюс** [Электронный ресурс]: справочная правовая система. / ООО «Консультант Плюс» Электрон. дан. Москва : КонсультантПлюс, [2024].
- **3. eLIBRARY.R**U: научная электронная библиотека : сайт / ООО «Научная Электронная Библиотека». Москва, [2024]. URL: http://elibrary.ru. Режим доступа : для авториз. пользователей. Текст : электронный
- **4.** Федеральная государственная информационная система «Национальная электронная библиотека» : электронная библиотека : сайт / ФГБУ РГБ. Москва, [2024]. URL: https://нэб.рф. Режим доступа : для пользователей научной библиотеки. Текст : электронный.
- **5.** Российское образование : федеральный портал / учредитель ФГАУ «ФИЦТО». URL: http://www.edu.ru. Текст : электронный.
- **6.** Электронная библиотечная система УлГУ: модуль «Электронная библиотека» АБИС Мега-ПРО / ООО «Дата Экспресс». URL: http://lib.ulsu.ru/MegaPro/Web. Режим доступа: для пользователей научной библиотеки. Текст: электронный.

Инженер ведущий

Щуренко Ю.В.

2024



F-Work program of the discipline

## 12. MATERIAL AND TECHNICAL SUPPORT OF THE DISCIPLINE:

Auditoriums for lectures, seminars, for monitoring and intermediate certification, group and individual consultations.

The auditoriums are equipped with specialized furniture, a training board. Lecture rooms are equipped with multimedia equipment to provide information to a large audience. Premises for independent work are equipped with computer equipment with the ability to connect to the Internet and provide access to the electronic information and educational environment, the electronic library system. The list of equipment used in the educational process is indicated in accordance with the information on the material and technical support and equipment of the educational process posted on the official website of UISU in the section "Information about the educational organization".

- 1. Methodical recommendations on all topics of the course.
- 2. Negatoscope.
- 3. A set of computer tomograms.
- 4. A set of sonograms, scans
- 5. A set of magnetic resonance imaging.
- 6. Tables, chairs, whiteboard
- 7. Flexible fiber endoscope, flexible bronchoscope.
- 8. Computers with Internet access.
- 9. Multimedia projector, screen, overhead projector

## 13. SPECIAL CONDITIONS FOR STUDENTS WITH DISABLED POSSIBILITIES

If necessary, students from among persons with disabilities (at the request of the student) can be offered one of the following options for the perception of information, taking into account their individual psychophysical characteristics:

-for persons with visual impairments: in printed form in an enlarged font; in the form of an electronic document; in the form of an audio file (translation of educational materials into audio format); in printed form in Braille; individual consultations with the involvement of a tiflosurd interpreter; individual assignments and consultations;

-for persons with hearing impairments: in printed form; in the form of an electronic document; videos with subtitles; individual consultations with the involvement of a sign language interpreter; individual assignments and consultations;

-for persons with disabilities of the musculoskeletal system: in printed form; in the form of an electronic document; in the form of an audio file; individual assignments and consultations.

If it is necessary to use partially/exclusively distance educational technologies in the educational process, the organization of the work of teaching staff with students with disabilities and disabilities is provided in an electronic information and educational environment, taking into account their individual psychophysical characteristics.

Developer	Head o	f the Department, Candidate of Medic	al Sciences, Associate Profess	or Sharafutdinov M.G
/	signature	position		full name
Developer _	B)	Candidate of Medical Sciences, As	ssociate Professor MorozovV	<u>s</u>
	signature	position	full name	
Developer_	m	Candidate of Medical Sciences, As	sociate Professo Matveeva L	<u>.V.</u>
	signature	position	full name	