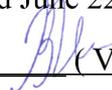


Ministry of science and high education RF Ulyanovsk State University Faculty of Medicine named after Biktimirov T.Z., IMEiPC	Form	
F-Educational plan of the discipline		



**APPROVED**  
by the decision of the Academic Council of  
IMEandFC UISU  
dated June 22, 2020, Protocol No. 10/220

Chairman

 (V.I. Midlenko)

«22» 06 2020 г.

### WORKING DISCIPLINES PROGRAM

Discipline	Bases of rational nutrition
Faculty	Medical
Department	Public health and health care
Course	III

Direction (specialty) 31.05.01 General medicine with partial training at English  
*code of the direction (specialty), full name*

Orientation (profile/specialization)  
*full name*

Internal form of education

Date of Introduction in educational process of UISU «01 " september 2020

The program is updated at a faculty meeting: protocol No. 1 from 31.08.2021

The program is updated at a faculty meeting: protocol No. 1 from 29.08. 2022

The program is updated at a faculty meeting: protocol No. \_\_\_\_\_ from \_\_\_\_\_ 20 \_\_\_\_\_.

Information about developers:

Name	Department	Degree, scientific rank
Alabina E.V.	Public health and health care	Associate professor, PhDs in Medicine.

Agreed	Agreed
Head of the department, developing discipline - head of the department of public health and health care	Head of graduating department hospital therapy
 / V.I. Gorbunov. / <i>Signature</i> <i>Full name</i> " 22 " 06 2020	 / Vize-Hripunova M. A. / <i>Signature</i> <i>Full name</i> " 22 " 06 2020

Ministry of science and high education RF Ulyanovsk State University Faculty of Medicine named after Biktimirov T.Z., IMEiPC	Form	
F-Educational plan of the discipline		

## 1. GOALS AND TASKS OF STUDYING THE COURSE

**Goals of studying the course:** hygiene of nutrition - the section of hygiene studying quality of foodstuff, their influence on an organism and developing the standards, requirements and recommendations about their production, storage and use directed to improvement of health of the population. The hygiene of nutrition is designed to develop scientific bases and practical actions for rational catering services of various groups of the population. The purpose of development of discipline is study: the criteria of risk caused by consumption of foodstuff which can make an adverse effect on a human body; theoretical fundamentals of science about rational nutrition; hygienic characteristic of the main components of food and their value for a human body; current trends in rationalization of food of various groups of the population; possible ways of pollution of food staples and foodstuff xenobiotics of chemical and biological origin and their influence on a human body; alimentary and dependent diseases and their prevention. Knowledge of a question of rational nutrition of the person are necessary for the doctor of any specialty.

**Tasks of studying the course:** to give to students modern knowledge of the basic principles of the organization of rational nutrition of the healthy and sick person; to teach to establish the reasons, conditions and risk factors of emergence and distribution among the population of the infectious and non-communicable diseases connected with foodstuff and to perform their prevention; to give knowledge of assessment of the quantitative and qualitative party of food and definition of the need for feedstuffs; to teach the principles of development and the organization of dietary, treatment-and-prophylactic food.

## 2. PLACE OF THE SUBJECT IN THE STRUCTURE OF GEP:

In accordance with the Federal State Education Standards of Higher Professional Education the academic course " Bases of rational nutrition " is classified as a variable part of disciplines at the choice of specialty 31.05.01 " General medicine " (higher professional education), which is studied in the V semester.

Development of discipline " Bases of rational nutrition " is based on knowledge, skills formed by the previous disciplines: «Design activity», «Assistant to the charge nurse».

Studying discipline " Bases of rational nutrition " allows students to gain necessary knowledge, skills at development of the subsequent disciplines: «Hygiene», «Preparation for delivery and passing state exam», «Assistant to the procedural nurse (Part 1)», «Assistant to the procedural nurse (Part 2)», «Medical rehabilitation», «Clinical practice (Medical assistant of a hospital)», «Urology and andrology».

## 3. LIST OF EXPECTED RESULTS OF INSTRUCTION ON THE SUBJECT (UNIT), CORELATED WITH PLANNED RESULTS OF COMPLETING THE PROGRAM

The code and the name of the implemented competence	The list of the planned results of training in discipline (module) correlated to indicators of achievement of competences
PC-14-	Know:

Ministry of science and high education RF Ulyanovsk State University Faculty of Medicine named after Biktimirov T.Z., IMEiPC	Form	
F-Educational plan of the discipline		

readiness for definition of need of use of natural medical factors, medicinal, non-drug therapy and other methods at the patients needing medical rehabilitation and sanatorium treatment	<p>principles of clinical nutrition, system of its organization, control of it; principles and system of the organization of preventive nutrition.</p> <p>Be able: to define need of use of clinical and preventive nutrition.</p> <p>Be able to use: methods of the restoration broken by a balance disease by means of a grocery set of diets corresponding to metabolic features of an organism, by methods of prevention of impact on an organism of adverse factors production and the environment and also risk factors of developing diseases.</p>
PC -15 - readiness to teach the patients and their relatives to carry out basic health-promoting hygienic activities, the skills of self-control of the principal physiological indicators contributing to the maintenance and promotion of health and prevention of diseases.	<p>Know: value of rational nutrition for preservation and promotion of health.</p> <p>Be able: to train patients and their relatives in skills of observance of rules of rational nutrition.</p> <p>Be able to use: to own methods of hygienic assessment of rationality of nutrition.</p>
PC-16 -readiness to carry out awareness-building aimed at elimination of the risk factors and forming the skills of healthy lifestyle.	<p>Know: complex of the actions directed to elimination of the risk factors caused by consumption of foodstuff which can make an adverse effect on a human body; preservation and strengthenings of health and the including forming of a healthy lifestyle, prevention and emergence and spread of the diseases connected with foodstuff and to perform their prevention.</p> <p>Be able: to reveal risk factors, the foodstuff caused by the use which can make an adverse effect on a human body; risk factors of emergence and spread of the diseases connected with foodstuff and to perform their prevention.</p> <p>Be able to use: by the methods directed to elimination of an adverse effect on health of the population of risk factors.</p>

#### 4. VOLUME OF THE SUBJECT

**4.1. Volume of the subject in credit points (total): 2 credit points**

**4.2. On types of academic workload (in hours):**

Ministry of science and high education RF Ulyanovsk State University Faculty of Medicine named after Biktimirov T.Z., IMEiPC	Form	
F-Educational plan of the discipline		

Type of study	Number of hours form of education: internal	
	Only according to the plan	Including on semester
		1
1	2	5 semester
Contact work of students with the teacher according to unitary enterprise*	36/36	36/36
Classroom occupations*: Lectures	36/36	36/36
practical and seminar training*	36/36	36/36
laboratory works, workshops		
Independent work*	36/36	36/36
Form of the current control of knowledge and control independent work: testing, Contras. work, colloquium, report, etc. *	Poll, testing, report	Poll, testing, report
Term report		
Types of intermediate certification (examination, offset) *	credit	credit
In total hours on discipline*	72/72	72/72

\* In case of need uses in educational process of partially/exclusively remote educational technologies in the table through a slash the number of hours of work of PPS with students for behavior of occupations in a remote format using electronic training is specified.

#### 4.3. Content of discipline (module.) Distribution of hours on subjects and types of study:

Internal form of education.

Name of sections and topics	In total	Types of studies					Form of the current control of knowledge
		Classroom lessons			Lessons in an interactive form	Independent work	
		Lectures	Practical training, seminars	Laboratory works, workshops			

Ministry of science and high education RF Ulyanovsk State University Faculty of Medicine named after Biktimirov T.Z., IMEiPC	Form	
F-Educational plan of the discipline		

1	2	3	4	5	6	7	
<b>Section 1. Main stages of development of hygiene of nutrition.</b>							
<b>Topic 1.</b> Main stages of development of hygiene of nutrition.	6					6	report
<b>Section 2. Bases of rational nutrition.</b>							
<b>Topic 2.</b> Metabolic cost and energy value of food.	2		2				poll
<b>Topic 3.</b> Value of proteins, fats and carbohydrates in food.	4		4				poll
<b>Topic 4.</b> Vitamins and their value in food.	2		2		1		poll
<b>Topic 5.</b> Mineral substances and their value in food.	2		2				poll
<b>Section 3. Theory of rational nutrition. Hygienic requirements to rational nutrition.</b>							
<b>Topic 6.</b> Theory of rational nutrition. Hygienic requirements to rational nutrition.	2		2				poll
<b>Section 4. Nutrition value and safety of foodstuff.</b>							
<b>Topic 7.</b> Hygienic requirements to quality of foodstuff. Hygienic assessment of quality and safety of products of plant origin.	2		2				poll
<b>Topic 8.</b> Hygienic	2		2				poll

Ministry of science and high education RF Ulyanovsk State University Faculty of Medicine named after Biktimirov T.Z., IMEiPC	Form	
F-Educational plan of the discipline		

assessment of quality and safety of animal products.							
<b>Topic 9.</b> Preserved foods.	2		2				poll
<b>Topic 10.</b> Products with the increased nutrition value.	2		2				poll
<b>Section 5. Alimentary and dependent diseases and their prevention.</b>							
<b>Topic 11.</b> Alimentary and dependent non-communicable diseases and their prevention.	2		2			2	poll
<b>Topic 12.</b> The diseases related to the infectious agents and parasites who are transferred with food.	2		2		1		poll
<b>Topic 13.</b> Food poisonings of not microbic nature.	2		2		1		poll
<b>Topic 14.</b> Poisonings with chemicals (xenobiotics).	6					6	report
<b>Section 6. Food of various groups of the population.</b>							
<b>Topic 15.</b> Assessment of a condition of food of various groups of the population.	2		2		1		poll
<b>Topic 16.</b> Nutrition in the conditions of adverse action environment factors.	6					6	report
<b>Topic 17.</b> Clinical nutrition.	3		3		1		poll
<b>Topic 18.</b> Treatment-and-prophylactic nutrition.	3		3		1		poll
<b>Topic 19.</b> Food of	6					6	report

Ministry of science and high education RF Ulyanovsk State University Faculty of Medicine named after Biktimirov T.Z., IMEiPC	Form	
F-Educational plan of the discipline		

children.							
<b>Topic 20.</b> Food of pregnant women and feeding.	6					6	report
<b>Topic 21.</b> Food of persons of old and senile age.	6					6	report
<b>Topic 22.</b> Concluding lesson. pass-fail test	2		2				Poll, testing
<b>Total</b>	<b>72</b>		<b>36</b>		<b>6</b>	<b>36</b>	

## 5. CONTENT OF THE COURSE

### Section 1. Main stages of development of hygiene of nutrition.

#### Topic 1. Main stages of development of hygiene of nutrition.

**Content of the topic.** History of formation and development of hygiene of nutrition. Founders of hygienic science of nutrition.

### Section 2. Energy, nutrition and biological value of food.

#### Topic 2. Metabolic cost and energy value of food.

**Content of the topic.** Exchange of energy in an organism. Energy balance. Metabolic cost of an organism. Methods of determination of energy requirement of people. Energy imbalance.

#### Topic 3. Value of proteins, fats and carbohydrates in food.

**Content of the topic.** Proteins and their value in food. Biological value of foodstuff. Methods of assessment of quality of protein. Diseases of malnutrition and redundancy of proteinaceous food and proteinaceous metabolism. Main solutions of a problem of providing population with protein. Nonconventional and new sources of protein. Fats and their value in food. Saturated fatty acids. Unsaturated fatty acids. Phospholipids and sterols. Consequences of excess intake of fats with food. Carbohydrates and their value in food. Functions of carbohydrates. Mono - and disaccharides. Oligosaccharides. Polysaccharides. Not starched polysaccharides. Food fibers.

#### Topic 4. Vitamins and their value in food.

**Content of the topic.** Classification of vitamins. Value of vitamins B of activity of an organism. Pseudo-vitamins substances. Mineral substances and their value in food.

#### Topic 5. Mineral substances and their value in food.

**Content of the topic.** Macrocells and microelements. Classification and characteristic of essential mineral elements. Imbalance of mineral substances. Standards of physiological requirement macro - and microelements. The reasons and manifestations of malnutrition and surplus macro - and microelements.

### Section 3. Theory of rational nutrition. Hygienic requirements to rational nutrition.

#### Topic 6. Theory of rational nutrition. Hygienic requirements to rational nutrition.

**Content of the topic.** Theory of rational nutrition. Balance of proteins, fats, carbohydrates. Balance of vitamins, mineral substances and microelements. Value of the mode and conditions of food and the main hygienic requirements to them.

Ministry of science and high education RF Ulyanovsk State University Faculty of Medicine named after Biktimirov T.Z., IMEiPC	Form	
F-Educational plan of the discipline		

#### **Section 4. Nutrition value and safety of foodstuff.**

##### **Topic 7. Hygienic requirements to quality of foodstuff. Hygienic assessment of quality and safety of products of plant origin.**

**Content of the topic.** Foodstuff. Quality of foodstuff. Nutrition value. Safety of foodstuff. The general principles of rationing of xenobiotics in foodstuff. Grain products. A role of grain products in developing of diseases of the person and forming of alien loading. Bean. Vegetables, greens, fruit, fruits and berries. Mushrooms. Nuts, seeds and oil-bearing crops.

##### **Topic 8. Hygienic assessment of quality and safety of animal products.**

**Content of the topic.** Hygienic assessment of quality and safety of animal products. Milk and dairy products. Eggs and egg products. Meat and meat products. Fish, fish products and seafood.

##### **Topic 9. Preserved foods.**

**Content of the topic.** Classification of canned food. Types of conservation of products. Veterinary and sanitary and hygienic examination of canned food.

##### **Topic 10. Products with the increased nutrition value.**

**Content of the topic.** Nutritional food and drink. Functional foodstuff. Dietary supplements to food. Hygienic approaches to forming of rational daily grocery set. Pyramid of healthy food.

#### **Section 5. Alimentary and dependent diseases and their prevention.**

##### **Topic 11. Alimentary and dependent non-communicable diseases and their prevention.**

**Content of the topic.** Food and prevention of excess body weight and obesity. Food and prevention of diabetes of the II type. Food and prevention of cardiovascular diseases. Food and prevention of oncological diseases. Food and prevention of osteoporosis. Food and prevention of caries. Food allergies and other manifestations of food intolerance.

##### **Topic 12. The diseases related to the infectious agents and parasites who are transferred with food.**

**Content of the topic.** Food poisonings of a microbic etiology. General factors of developing of food poisonings of a microbic etiology. Food toxicoinfections and their prevention. Food bacterial toxicoses. Food mycotoxicosis.

##### **Topic 13. Food poisonings of not microbic nature.**

**Content of the topic.** Poisonings with mushrooms. Poisonings with poisonous plants. Poisonings with seeds of the weed plants polluting cereal cultures. Poisonings with the animal products poisonous by the nature. Poisonings with vegetable products, poisonous under certain conditions. Poisonings with animal products, poisonous under certain conditions.

##### **Topic 14. Poisonings with chemicals (xenobiotics).**

**Content of the topic.** Poisonings with heavy metals and arsenic. Poisonings with pesticides and other agrochemicals. Poisonings with components of agrochemicals. Nitrosamines. The polychlorinated biphenyls. Acrylamide. Investigation of food poisonings.

#### **Section 6. Food of various groups of the population.**

##### **Topic 15. Assessment of a condition of food of various groups of the population.**

**Content of the topic.** Condition of food of the person. Assessment of the actual food, state of health, ecological status. **Analysis and optimization of organized food of the population.**

##### **Topic 16. Nutrition in the conditions of adverse action environment factors.**

Ministry of science and high education RF Ulyanovsk State University Faculty of Medicine named after Biktimirov T.Z., IMEiPC	Form	
F-Educational plan of the discipline		

**Content of the topic.** Bases of alimentary adaptation. **Mechanisms of alimentary regulation of metabolism of xenobiotics. Catering services of the population in the conditions of alien loading. Hygienic control of a state and catering services of the population living in conditions of radioactive loading. The main ways of migration of radionuclides in the biosphere. Distribution and concentration of radionuclides in the main groups of food staples. Rationing of radionuclides. Alimentary ways of decrease in radio loading. Catering services of the population in the conditions of radioactive loading.**

#### **Topic 17. Clinical nutrition.**

**Content of the topic.** Modern clinical nutrition. Signs and features of clinical nutrition. Principles of clinical nutrition. Nomenclature of dietary tables. New nomenclature of diets. Requirements to the organization of clinical nutrition in MPI and sanatorium institutions. Recommendations about the equipment of catering department and still-rooms and requirement to the sanitary and hygienic mode. Dietary food in a public catering, sanatoria and dispensaries.

#### **Topic 18. Treatment-and-prophylactic nutrition.**

**Content of the topic.** Treatment-and-prophylactic nutrition. TPF diets. Milk (fermented milk products). Vitamin drugs. Work in the conditions of high temperatures. Rules of delivery of TPF.

#### **Topic 19. Nutrition of children.**

**Content of the topic.** Nutrition of children. Physiological norms of food of children. Nutrition of children of early age. Catering services of children. Sanitary and hygienic requirements to production and turnover of foodstuff of the children's range.

#### **Topic 20. Nutrition of pregnant women and feeding.**

**Content of the topic.** Food of pregnant women and feeding. Food of women in the first and in the second half of pregnancy.

#### **Topic 21. Nutrition of elderly.**

**Content of the topic.** Age features of an organism of elderly and basic principles of nutrition of elderly. Standard daily rates of physiological requirement of energy and feedstuffs for elderly.

#### **Topic 22. Concluding lesson.**

**Content of the topic.** Poll, testing.

## **6. TOPICS OF PRACTICAL CLASSES AND SEMINARS**

### **Section 1. Energy, nutrition and biological value of food.**

#### **Topic 1. Metabolic cost and energy value of food.**

##### **Practical occupation.**

**Questions** (for discussion).

1. Exchange of energy in an organism.
2. Energy balance.
3. Metabolic cost of an organism.
4. Methods of determination of energy requirement of people.
5. Energy imbalance.

#### **Topic 2. Value of proteins, fats and carbohydrates in food.**

##### **Practical occupation.**

**Questions** (for discussion).

Ministry of science and high education RF Ulyanovsk State University Faculty of Medicine named after Biktimirov T.Z., IMEiPC	Form	
F-Educational plan of the discipline		

1. Proteins and their value in food.
2. Biological value of foodstuff.
3. Methods of assessment of quality of protein.
4. Diseases of malnutrition and redundancy of proteinaceous food and proteinaceous metabolism.
5. Main solutions of a problem of providing population with protein.
6. Nonconventional and new sources of protein.
7. Fats and their value in food.
8. Saturated fatty acids.
9. Unsaturated fatty acids.
10. Phospholipids and sterols.
11. Consequences of excess intake of fats with food.
12. Carbohydrates and their value in food.
13. Functions of carbohydrates.
14. Mono - and disaccharides.
15. Oligosaccharides.
16. Polysaccharides.
17. Not starched polysaccharides.
18. Food fibers.

### **Topic 3. Vitamins and their value in food.**

#### **Practical occupation.**

#### **Questions (for discussion).**

1. Classification of vitamins.
2. Value of vitamins B of activity of an organism.
1. Ascorbic acid. Comprehensibility and physiological functions. Standards of physiological requirement. Main food sources and possibility of providing organism. Manifestations of malnutrition and surplus.
2. Bioflavonoids. Comprehensibility and physiological functions. Standards of physiological requirement. Main food sources and possibility of providing organism.
3. B1 vitamin. Comprehensibility and physiological functions. Standards of physiological requirement. Main food sources.
4. Vitamin B<sub>2</sub>. Comprehensibility and physiological functions. Standards of physiological requirement. Main food sources.
5. Vitamin B<sub>6</sub>. Comprehensibility and physiological functions. Standards of physiological requirement. Main food sources and possibility of providing organism.
6. PP vitamin. Comprehensibility and physiological functions. Standards of physiological requirement. Main food sources and possibility of providing organism.
7. Folic acid. Comprehensibility and physiological functions. Standards of physiological requirement. Main food sources and possibility of providing organism.
8. B12 vitamin. Comprehensibility and physiological functions. Standards of physiological requirement. Main food sources and possibility of providing organism.
9. Pantothenic acid. Comprehensibility and physiological functions. Standards of physiological requirement. Main food sources and possibility of providing organism.
10. Biotin. Comprehensibility and physiological functions. Standards of physiological requirement. Main food sources and possibility of providing organism.
11. Vitamin A. Comprehensibility and physiological functions. Standards of physiological requirement. Main food sources and possibility of providing organism.
12. Vitamin D. Comprehensibility and physiological functions. Standards of physiological

Ministry of science and high education RF Ulyanovsk State University Faculty of Medicine named after Biktimirov T.Z., IMEiPC	Form	
F-Educational plan of the discipline		

- requirement. Main food sources and possibility of providing organism.
13. Vitamin E. Comprehensibility and physiological functions. Standards of physiological requirement. Main food sources and possibility of providing organism.
  14. Vitamin K. Comprehensibility and physiological functions. Standards of physiological requirement. Main food sources and possibility of providing organism.
  15. Pseudo-vitamins substances. Comprehensibility and physiological functions. Standards of physiological requirement. Main food sources and possibility of providing organism.

#### **Topic 4. Mineral substances and their value in food.**

##### **Practical occupation.**

##### **Questions (for discussion).**

1. Macrocells and microelements.
2. Classification and characteristic of essential mineral elements.
3. Imbalance of mineral substances.
4. Standards of physiological requirement macro - and microelements.
5. The reasons and manifestations of malnutrition and surplus macro - and microelements.

#### **Section 3. Theory of rational nutrition. Hygienic requirements to rational nutrition.**

#### **Topic 5. Theory of rational nutrition. Hygienic requirements to rational nutrition.**

##### **Practical occupation.**

##### **Questions (for discussion).**

1. Theory of rational nutrition.
2. Balance of proteins.
3. Balance of fats.
4. Balance of carbohydrates.
5. Balance of vitamins, mineral substances and microelements.
6. Value of the mode and conditions of food and the main hygienic requirements to them.

#### **Section 4. Nutrition value and safety of foodstuff.**

#### **Topic 6. Hygienic requirements to quality of foodstuff. Hygienic assessment of quality and safety of products of plant origin.**

##### **Practical occupation.**

##### **Questions (for discussion).**

1. Foodstuff. Quality of foodstuff. Nutrition value.
2. Safety of foodstuff.
3. The general principles of rationing of xenobiotics in foodstuff.
4. Grain products.
5. Role of grain products in developing of diseases of the person and forming of alien loading.
6. Bean.
7. Vegetables, greens, fruit, fruits and berries.
8. Mushrooms.
9. Nuts, seeds and oil-bearing crops.

#### **Topic 7. Hygienic assessment of quality and safety of animal products.**

##### **Practical occupation.**

##### **Questions (for discussion).**

1. Hygienic assessment of quality and safety of animal products.
2. Milk and dairy products.

Ministry of science and high education RF Ulyanovsk State University Faculty of Medicine named after Biktimirov T.Z., IMEiPC	Form	
F-Educational plan of the discipline		

3. Eggs and egg products.
4. Meat and meat products.
5. Fish, fish products and seafood.

### **Topic 8. Preserved foods.**

#### **Practical occupation.**

#### **Questions (for discussion).**

1. Classification of canned food.
2. Types of conservation of products.
3. Veterinary and sanitary and hygienic examination of canned food.

### **Topic 9. Products with the increased nutrition value.**

#### **Practical occupation.**

#### **Questions (for discussion).**

1. Nutritional food and drink.
2. Functional foodstuff.
3. Dietary supplements to food.
4. Hygienic approaches to forming of rational daily grocery set.
5. Pyramid of healthy food.

### **Section 5. Alimentary and dependent diseases and their prevention.**

#### **Topic 10. Alimentary and dependent non-communicable diseases and their prevention.**

#### **Practical occupation.**

#### **Questions (for discussion).**

1. Food and prevention of excess body weight and obesity.
2. Food and prevention of diabetes of the II type.
3. Food and prevention of cardiovascular diseases.
4. Food and prevention of oncological diseases.
5. Food and prevention of osteoporosis.
6. Food and prevention of caries.
7. Food allergies and other manifestations of food intolerance.

#### **Topic 11. The diseases related to the infectious agents and parasites who are transferred with food.**

#### **Practical occupation.**

#### **Questions (for discussion).**

1. Food poisonings of a microbic etiology.
2. General factors of developing of food poisonings of a microbic etiology.
3. Food toxicoinfections and their prevention.
4. Food bacterial toxicoses.
5. Food mycotoxicoses.

#### **Topic 12. Food poisonings of not microbic nature.**

#### **Practical occupation.**

#### **Questions (for discussion).**

1. Poisonings with mushrooms.
2. Poisonings with poisonous plants.
3. Poisonings with seeds of the weed plants polluting cereal cultures.

Ministry of science and high education RF Ulyanovsk State University Faculty of Medicine named after Biktimirov T.Z., IMEiPC	Form	
F-Educational plan of the discipline		

4. Poisonings with the animal products poisonous by the nature.
5. Poisonings with vegetable products, poisonous under certain conditions.
6. Poisonings with animal products, poisonous under certain conditions.

## **Section 6. Food of various groups of the population.**

### **Topic 13. Assessment of a condition of food of various groups of the population.**

#### **Practical occupation.**

#### **Questions (for discussion).**

1. Condition of food of the person.
2. Assessment of the actual food, state of health, ecological status.
3. Analysis and optimization of organized food of the population.

### **Topic 14. Nutrition in the conditions of adverse action environment factors.**

#### **Practical occupation.**

#### **Questions (for discussion).**

1. Bases of alimentary adaptation.
2. Mechanisms of alimentary regulation of metabolism of xenobiotics.
3. Hygienic control of a state and catering services of the population living in conditions of radioactive loading.
4. The main ways of migration of radionuclides in the biosphere.
5. Distribution and concentration of radionuclides in the main groups of food staples.
6. Rationing of radionuclides.
7. Alimentary ways of decrease in radio loading.
8. Catering services of the population in the conditions of radioactive loading.

### **Topic 15. Clinical nutrition.**

#### **Practical occupation.**

#### **Questions to a Topic (for discussion).**

1. Modern clinical nutrition.
2. Signs and features of clinical nutrition.
3. Principles of clinical nutrition.
4. Nomenclature of dietary tables.
5. New nomenclature of diets.
6. Requirements to the organization of clinical nutrition in MPI and sanatorium institutions.
7. Recommendations about the equipment of catering department and still-rooms and requirement to the sanitary and hygienic mode.
8. Dietary food in a public catering, sanatoria and dispensaries.

### **Topic 16. Treatment-and-prophylactic food.**

#### **Practical occupation.**

#### **Questions (for discussion).**

1. Treatment-and-prophylactic Food (TPF).
2. TPF diets.
3. Milk (fermented milk products).
4. Vitamin drugs.
5. Work in the conditions of high temperatures.
6. Rules of delivery of TPF.

Ministry of science and high education RF Ulyanovsk State University Faculty of Medicine named after Biktimirov T.Z., IMEiPC	Form	
F-Educational plan of the discipline		

## Topic 17. Concluding lesson.

Content of the topic. Poll, testing.

### 7. LABORATORY CLASSES

This type of works is not provided unitary enterprise.

### 8. SUBJECTS OF REPORTS

№	Topics	Approximate subjects of reports
1.	Main stages of development of hygiene of nutrition.	<ol style="list-style-type: none"> <li>History of formation and development of hygiene of nutrition.</li> <li>Founders of hygienic science of nutrition.</li> </ol>
2.	Nutrition in the conditions of adverse environment factors.	<ol style="list-style-type: none"> <li>Bases of alimentary adaptation. Mechanisms of alimentary regulation of metabolism of xenobiotics. Catering services of the population in the conditions of alien loading.</li> <li>Hygienic control of a state and catering services in conditions of radioactive loading.</li> </ol>
3.	Poisonings with chemicals (xenobiotics).	<ol style="list-style-type: none"> <li>Poisonings with heavy metals and arsenic.</li> <li>Poisonings with pesticides and other agrochemical means.</li> <li>Poisonings with components of agrochemicals.</li> <li>Nitrosamines. The polychlorinated biphenyls. Acrylamide.</li> <li>Investigation of the food poisonings caused by chemicals (xenobiotics).</li> </ol>
4.	Nutrition of children.	<ol style="list-style-type: none"> <li>Feeding habits of children</li> <li>Food of children of early age</li> <li>Catering services of children. Sanitary and hygienic requirements to production and turnover of foodstuff of the children's range.</li> </ol>
5.	Nutrition of pregnant women and feeding.	<ol style="list-style-type: none"> <li>The physiological changes in an organism happening during pregnancy.</li> <li>Nutritional habits of pregnant women and feeding. of women in the first half of pregnancy.</li> <li>Food of women in the second half of pregnancy.</li> </ol>
6.	Nutrition of elderly.	<ol style="list-style-type: none"> <li>Age features of an organism of elderly and basic principles of nutrition of elderly.</li> <li>Standard daily rates of physiological requirement of energy and feedstuffs for elderly.</li> </ol>

### 9. QUESTIONS FOR CREDIT

Ministry of science and high education RF Ulyanovsk State University Faculty of Medicine named after Biktimirov T.Z., IMEiPC	Form	
F-Educational plan of the discipline		

1. Main stages of development of hygiene of nutrition.
2. Metabolic cost of an organism. Methods of determination of energy requirement of people.
3. Biological role of proteins, sources, norms. Amino acids. Amino-acid it is fast.
4. Biological role of fats, sources, norms.
5. Biological role of carbohydrates, sources, norms.
6. Biological role of water-soluble vitamins, sources, norms.
7. Biological role of oil-soluble vitamins, sources, norms.
8. Biological role of mineral substances, sources, norms.
9. Theory of rational nutrition. Hygienic requirements to rational nutrition of the person.
10. Hygienic requirements to quality of foodstuff. Hygienic assessment of quality and safety of products of plant origin.
11. Hygienic assessment of quality and safety of animal products.
12. Classification of canned food. Types of conservation of products. Veterinary- sanitary and hygienic examination of canned food.
13. Products with the increased nutrition value.
14. Pyramid of healthy food.
15. Food and prevention of excess body weight and obesity.
16. Food and prevention of diabetes of the II type.
17. Food and prevention of cardiovascular diseases.
18. Food and prevention of oncological diseases.
19. Food and prevention of osteoporosis.
20. Food and prevention of caries.
21. Food allergies and other manifestations of food intolerance.
22. Food poisonings of a microbic etiology.
23. Food toxicoinfections and their prevention. Food bacterial toxicoses. Food mycotoxicosis.
24. Food poisonings of not microbic nature.
25. Poisonings with chemicals (xenobiotics).
26. Assessment of a condition of food of the person.
27. Nutrition in the conditions of adverse action of factors of the environment.
28. Principles of clinical nutrition. Nomenclature of dietary tables. New nomenclature of diets.
29. Treatment-and-prophylactic food. TPF diets. Milk (fermented milk products). Vitamin drugs. Work in the conditions of high temperatures. Rules of delivery of TPF.
30. Nutritional habits of children.
31. Catering services of children. Sanitary and hygienic requirements to production and turnover of foodstuff of the children's range.
32. The physiological changes in an organism happening during pregnancy. Nutritional habits of pregnant women and feeding.
33. Age features of an organism of elderly people and basic principles of nutrition of elderly.

## 10. SELF-STUDY WORK OF STUDENTS

Internal form of education.

Name and sections, and that	Type of independent work	Volume in hours	Control form
-----------------------------	--------------------------	-----------------	--------------

Ministry of science and high education RF Ulyanovsk State University Faculty of Medicine named after Biktimirov T.Z., IMEiPC	Form	
F-Educational plan of the discipline		

Main stages of development of hygiene of nutrition.	study of a training material, report, preparation for passing a test.	6	Verification of the report, offset
Nutrition in the conditions of adverse action environment factors.	study of a training material, report, preparation for passing a test.	6	Verification of the report, offset
Poisonings with chemicals (xenobiotics).	study of a training material, report, preparation for passing a test.	6	Verification of the report
Nutrition of children.	study of a training material, report, preparation for passing a test.	6	Verification of the report
Nutrition of pregnant women and feeding.	study of a training material, report, preparation for passing a test.	6	Verification of the report
Nutrition of elderly.	study of a training material, report, preparation for passing a test.	6	Verification of the report, offset

## 11. EDUCATIONAL-METHODICAL AND INFORMATION SUPPORT OF DISCIPLINE

### a) List of recommended literature

#### main literature:

1. Katz, David L. Friedman, Rachel S. C. Lucan, Sean C. Nutrition in Clinical Practice.- Third edition. Place of publicati[on not identified] : Wolters Kluwer Health. 2014 <http://search.ebscohost.com/login.aspx?direct=true&db=e600xww&AN=1473233&site=ehost-live>
2. Educational and methodological textbook for practical classes on hygiene [Электронный ресурс] / Shashina E.A., Makarova V.V. - М.: ГЭОТАР-Медиа, 2020. Режим доступа: <http://client.studentlibrary.ru/book/ISBN9785970452899.html>

#### additional literature:

1. Osloпов V.N., General Care of a Patient / Osloпов V.N., Bogoyavlenskaya O.V. - М. : ГЭОТАР-Медиа, 2019. - 208 с. - ISBN 978-5-9704-5234-9 - Текст : электронный // ЭБС "Консультант студента" : [сайт]. - URL : <https://www.studentlibrary.ru/book/ISBN9785970452349.html>

#### educational and methodical literature:

1. Makhova, N. A. Laboratory manual of hygiene for foreign medical students / N. A. Makhova, Zayneeva R. Sh., M. B. Niezmykhamedova ; Ulyanovsk State University, Institute of Medicine, Ecology and Physical culture. - Электрон. текстовые дан. (1 файл : 451 КБ). - Ulyanovsk : ULSU, 2017. - Текст на англ. яз. - Загл. с экрана. - Текст: электронный <http://lib.ulsu.ru/MegaPro/Download/MObject/935>
2. Alabina E. V. Methodical instructions for independent work of students on discipline "Bases of rational nutrition" for specialty 05.31.01 "General Medicine" / E. V. Alabina;

Ministry of science and high education RF Ulyanovsk State University Faculty of Medicine named after Biktimirov T.Z., IMEiPC	Form	
F-Educational plan of the discipline		

Ulyanovsk state university. - Ulyanovsk : UISU, 2019. - Загл. с экрана; Неопубликованный

ресурс; На англ. яз. - Электрон. текстовые дан. (1 файл : 138 КБ). - Текст : электронный.  
<http://lib.ulsu.ru/MegaPro/Download/MObject/4794>

Coordinated:

/Chief librarian of SL UISU/ Stadolnikova D.R./  
 Position of the employee of scientific library Full name

  
 signature

### c) Professional databases, directory systems

#### 1. Electronic and library systems:

- 1.1. IPRbooks: electronic and library system: IP Ar Media website / group of companies. - Saratov, [2020]. – URL: <http://www.iprbookshop.ru>. – Access mode: for zaregistrir. users. - Text: electronic.
- 1.2. YuRAYT: electronic and library system: Website / LLC YuRAYT E-publishing house. – Moscow, [2020]. - URL: <https://www.biblio-online.ru>. – Access mode: for zaregistrir. users. - Text: electronic.
- 1.3. Student's consultant: electronic and library system: Website / LLC Politekhresurs. – Moscow, [2020]. – URL: [http://www.studentlibrary.ru/catalogue/switch\\_kit/x2019-128.html](http://www.studentlibrary.ru/catalogue/switch_kit/x2019-128.html). – Access mode: for zaregistrir. users. – Text: electronic.
- 1.4. Fallow deer: electronic and library system: Website / LLC EBS Lan. – St. Petersburg, [2020]. – URL: <https://e.lanbook.com>. – Access mode: for zaregistrir. users. – Text: electronic.
- 1.5. Znanium.com: electronic and library system: Website / LLC Znanium. - Moscow, [2020]. - URL: <http://znanium.com>. – Access mode: for zaregistrir. users. - Text: electronic.
- 1.6. Clinical Collection: a collection for the medical universities, clinics, medical libraries//EBSCOhost: [portal]. – URL: <http://web.a.ebscohost.com/ehost/search/advanced?vid=1&sid=e3ddfb99-a1a7-46dd-a6eb-2185f3e0876a%40sessionmgr4008>. – Access mode: for autocopes. users. – Text: electronic.

**2. ConsultantPlus** [Electronic resource]: help legal system. / LLC Konsultant Plus - the Electron. given. - Moscow: ConsultantPlus, [2020].

#### 3. Databases of periodicals:

- 3.1. Database of periodicals: IVIS online magazines / Ltd companies. - Moscow, [2020]. – URL: <https://dlib.eastview.com/browse/udb/12>. – Access mode: for autocopes. users. – Text: electronic.
- 3.2. eLIBRARY.RU: scientific electronic library: Website / LLC Nauchnaya Elektronnaya

Ministry of science and high education RF Ulyanovsk State University Faculty of Medicine named after Biktimirov T.Z., IMEiPC	Form	
F-Educational plan of the discipline		

Biblioteka. – Moscow, [2020]. – URL: <http://elibrary.ru>. – Access mode: for autopes. users. – Text: electronic

3.3. "Grebennikon": electronic library / IDES Grebennikov. – Moscow, [2020]. – URL: <https://id2.action-media.ru/Personal/Products>. – Access mode: for autopes. users. – Text: electronic.

**4. National electronic library:** electronic library: federal state information system: website / the Ministry of Culture of the Russian Federation; RGB. – Moscow, [2020]. – URL: <https://нэб.рф>. – Access mode: for users of scientific library. – Text: electronic.

**5. SMART Imagebase//EBSCOhost:** [portal]. – URL: <https://ebco.smartimagebase.com/?TOKEN=EBSCO-1a2ff8c55aa76d8229047223a7d6dc9c&custid=s6895741>. – Access mode: for autopes. users. – Image: electronic.

#### **6. Federal information and education portals:**

6.1. Uniform window of access to educational resources: federal DPO FGAOU portal / founder TSRGOP and IT. – URL: <http://window.edu.ru/>. – Text: electronic.

6.2. Russian education: federal DPO FGAOU portal / founder TSRGOP and IT. – URL: <http://www.edu.ru>. – Text: electronic.

#### **7. UISU educational resources:**

7.1. UISU electronic library: module ABIS Mega-missile Defence / LLC Data Express. – URL: <http://lib.ulsu.ru/MegaPro/Web>. – Access mode: for users of scientific library. – Text: electronic.

7.2. UISU educational portal. – URL: <http://edu.ulsu.ru>. – Access mode: for zaregistr. users. – Text: electronic.

Coordinated:

*Zaeva Maria Gilevna / Kuznetsova SV*  
Employee's position UIITT

Full name

signature date

## **12. MATERIAL SUPPORT OF DISCIPLINE:**

For training the following material support is used: educational audiences for carrying out a practical training and individual consultations, the current control and intermediate certification with a set of the demonstration equipment for ensuring representation of illustrative material for discipline according to the working program.

The room is completed with a set of student furniture on 24 seats.

## **13. SPECIAL CONDITIONS FOR STUDENTS WITH LIMITED OPPORTUNITIES OF HEALTH**

Training students with disabilities is carried out taking into account the peculiarities of psychophysical development, individual capabilities and health of such students. Education of students with disabilities can be organized in conjunction with other students, and separately. If necessary, students from among persons with disabilities (at the request of the student) may be offered one of the following options for the perception of information, taking into account their individual psychophysical characteristics:

- for persons with visual impairment: in printed form in large print; 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 special translator; individual tasks and consultations.
- for persons with hearing impairment: in printed form; in the form of an electronic document; video materials with subtitles; individual consultations with the assistance of a sign language interpreter; individual tasks and consultations.
- for persons with musculoskeletal disorders: in printed form; in the form of an electronic

Ministry of science and high education RF Ulyanovsk State University Faculty of Medicine named after Biktimirov T.Z., IMEiPC	Form	
F-Educational plan of the discipline		

document; in the form of an audio file; individual tasks and consultations."

- if it is necessary to use partially or exclusively remote educational technologies in the educational process, the organization of work of teaching staff with students with disabilities is provided in an electronic information and educational environment, taking into account their individual psychological characteristics

Developer

Associate professor, PhDs in Medicine /Alabina E.V./  
*The position of the worker*



*name*

*signature*

Ministry of science and high education RF Ulyanovsk State University Faculty of Medicine named after Biktimirov T.Z., IMEiPC	Form	
F-Educational plan of the discipline		

**LIST OF CHANGES of  
discipline” HYGIENE”  
Speciality 31.05.01. «General medicine»**

№	Content of the change or a link to the attached text of the	Full name of the head of the Department developing the discipline	Signature	Date
1	Appendix 1 "Amendments to item a) The list of recommended literature item 11 "Educational, methodological and informational support of discipline / practice" with the design of a separate appendix	Gorbunov V.I.		31.08.2021
2	Appendix 1 "Amendments to item b) Professional databases of item 11 "Educational, methodological and informational support of discipline/practice" with the design of a separate appendix	Gorbunov V.I.		31.08.2021
3.	Appendix 2 "Amendments to Table 4.2 on the possibility of conducting classes remotely"	Gorbunov V.I.		31.08.2021



Ministry of science and high education RF Ulyanovsk State University Faculty of Medicine named after Biktimirov T.Z., IMEiPC	Form	
F-Educational plan of the discipline		

## b) Software

name	Contract
Union of Right Forces Consultant Plus	Contract №1-2016-1327 of 01.03.2016
NAB OF THE RUSSIAN FEDERATION	Contract No. 101/NEB/2155 of 14.04.2017
EBS IPRBooks	contract No. 4429/18 of 10.10.2018
AIBS "MegaPro"	Contract No. 727 of 22.11.2018
Microsoft Windows OS	contract No. 580 of 29.08.2014, contract No. 581 of 29.08.2014
Microsoft Office 2016	Contract No. 991 of 21.12.2016
or	
"MoyOfis the Standard"	Contract No. 793 of 14.12.2018

## c) Professional databases, directory systems

### 1. Electronic and library systems:

#### 1. Электронно-библиотечные системы:

1.1. IPRbooks : электронно-библиотечная система : сайт / группа компаний Ай Пи Ар Медиа. - Саратов, [2021]. – URL: <http://www.iprbookshop.ru>. – Режим доступа: для зарегистрир. пользователей. - Текст : электронный.

1.2. ЮРАЙТ : электронно-библиотечная система : сайт / ООО Электронное издательство ЮРАЙТ. – Москва, [2021]. - URL: <https://urait.ru>. – Режим доступа: для зарегистрир. пользователей. - Текст : электронный.

1.3. Консультант студента : электронно-библиотечная система : сайт / ООО Политехресурс. – Москва, [2021]. – URL: <https://www.studentlibrary.ru/cgi-bin/mb4x>. – Режим доступа: для зарегистрир. пользователей. – Текст : электронный.

1.4. Консультант врача : электронно-библиотечная система : сайт / ООО Высшая школа организации и управления здравоохранением-Комплексный медицинский консалтинг. – Москва, [2021]. – URL: <https://www.rosmedlib.ru>. – Режим доступа: для зарегистрир. пользователей. – Текст : электронный.

1.5. Большая медицинская библиотека : электронно-библиотечная система : сайт / ООО Букап. – Томск, [2021]. – URL: <https://www.books-up.ru/ru/library/>. – Режим доступа: для зарегистрир. пользователей. – Текст : электронный.

1.6. Лань : электронно-библиотечная система : сайт / ООО ЭБС Лань. – Санкт-Петербург, [2021]. – URL: <http://www.studentlibrary.ru/pages/catalogue.html> <https://e.lanbook.com>. – Режим доступа: для зарегистрир. пользователей. – Текст : электронный.

1.7. Znanium.com : электронно-библиотечная система : сайт / ООО Знаниум. - Москва, [2021]. - URL: <http://www.studentlibrary.ru/pages/catalogue.html> <http://znanium.com>. – Режим доступа : для зарегистрир. пользователей. - Текст : электронный.

1.8. Clinical Collection : коллекция для медицинских университетов, клиник, медицинских библиотек // EBSCOhost : [портал]. – URL: <http://web.b.ebscohost.com/ehost/search/advanced?vid=1&sid=9f57a3e1-1191-414b-8763-e97828f9f7e1%40sessionmgr102>. – Режим доступа : для авториз. пользователей. – Текст : электронный.

1.9. Русский язык как иностранный : электронно-образовательный ресурс для иностранных студентов : сайт / ООО Компания «Ай Пи Ар Медиа». – Саратов, [2021]. – URL: <https://ros-edu.ru>. – Режим доступа: для зарегистрир. пользователей. – Текст : электронный.

2. КонсультантПлюс [Электронный ресурс]: справочная правовая система. /ООО «Консультант Плюс» - Электрон. дан. - Москва : КонсультантПлюс, [2021].



Ministry of science and high education RF Ulyanovsk State University Faculty of Medicine named after Biktimirov T.Z., IMEiPC	Form	
F-Educational plan of the discipline		

**LIST OF CHANGES of  
Educational plan of discipline " Bases of rational nutrition "**

**Speciality 31.05.01. «General medicine»**

№	Content of the change or a link to the attached text of the	Full name of the head of the Department developing the discipline	Signature	Date
1	Introduction of changes to item C) Professional databases, information and reference systems item 11 "Educational, methodological and information support of the discipline" with the design of Appendix 1	Горбунов В.И.		29.08.2022
2	Introduction of changes to item A) Recommended Literature item 11 "Educational, methodological and information support of the discipline" with the design of Appendix 2	Горбунов В.И.		29.08.2022

Ministry of science and high education RF Ulyanovsk State University Faculty of Medicine named after Biktimirov T.Z., IMEiPC	Form	
F-Educational plan of the discipline		

Приложение 1

## 11. EDUCATIONAL AND METHODOLOGICAL AND INFORMATION SUPPORT OF DISCIPLINE

### a) List of recommended literature

#### main literature:

1. Melnichenko, P. I. Hygiene : textbook / ed. Melnichenko P. I. - Москва : ГЭОТАР-Медиа, 2021. - 512 с. - ISBN 978-5-9704-5919-5. - Текст : электронный // ЭБС "Консультант студента" : [сайт]. – URL : <https://www.studentlibrary.ru/book/ISBN9785970459195.html>
2. FoodHygiene :tutorial / Ю. А. Пфаргер, В. С. Кавешников, В. Н. Серебрякова и др. - Томск : Издательство СибГМУ, 2018. - 132 с. - Текст : электронный // ЭБС "Букап" : [сайт]. - URL : <https://www.books-up.ru/ru/book/food-hygiene-7637970/>

#### additional literature:

1. Katz, David L. Friedman, Rachel S. C. Lucan, Sean C. Nutrition in Clinical Practice.-Third edition. Place of publicati[on not identified] : Wolters Kluwer Health. 2014 <http://search.ebscohost.com/login.aspx?direct=true&db=e600xww&AN=1473233&site=ehost-live>
- 2.Makhova, N. A. Laboratory manual of hygiene for foreign medical students / N. A. Makhova, Zayneeva R. Sh., M. B. Niezmykhamedova ; Ulyanovsk State University, Insitute of Medicine, Ecology and Physical culture. - Электрон. текстовыедан. (1 файл : 451 КБ). - Ulyanovsk :ULSU, 2017. - Текст на англ. яз. - Загл. с экрана. - Текст : электронный <http://lib.ulsu.ru/MegaPro/Download/MObject/935>
- 3.Educational and methodological textbook for practical classes on hygiene [Электронныйресурс] / Shashina E.A., Makarova V.V. - М.: ГЭОТАР-Медиа, 2020. Режимдоступа: <http://studentlibrary.ru/book/ISBN9785970452899.html>

#### educational and methodical literature:

- 1.**AlabinaE.V.** Methodical instructions for organization of independent work of students for discipline for discipline "Bases of rational nutrition" for specialty 31.05.01 "General medicine" / E. V. Alabina. - Ulyanovsk :UISU, 2022. - Неопубликованныйресурс. - URL: <http://lib.ulsu.ru/MegaPro/Download/MObject/11496>. - Режимдоступа: ЭБСУЛГУ. - Текст :электронный.

Coordinated:

/Chief librarian of SL UISU/ Stadolnikova D.R./   
Position of the employee of scientific libraryFull namesignature

Ministry of science and high education RF Ulyanovsk State University Faculty of Medicine named after Biktimirov T.Z., IMEiPC	Form	
F-Educational plan of the discipline		

## Приложение 2

### c) Professional databases, directory systems

#### 1. Electronic and library systems:

##### 1. Электронно-библиотечные системы:

1.1. Цифровой образовательный ресурс IPRsmart: электронно-библиотечная система:сайт / ООО Компания «Ай Пи Ар Медиа». - Саратов, [2022]. - 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, [2022]. - URL: <https://urait.ru>. - Режим доступа: для зарегистрир. пользователей. - Текст : электронный.

1.3. Консультант врача. Электронная медицинская библиотека : база данных : сайт / ООО Высшая школа организации и управления здравоохранением-Комплексный медицинский консалтинг. - Москва, [2022]. - URL: <https://www.rosmedlib.ru>. - Режим доступа: для зарегистрир. пользователей. - Текст:электронный.

1.4. Большая медицинская библиотека : электронно-библиотечная система : сайт / ООО Букап. - Томск, [2022]. - URL: <https://www.books-up.ru/ru/library/>. - Режим доступа: для зарегистрир. пользователей. - Текст:электронный.

1.5. ЭБС Лань : электронно-библиотечная система : сайт / ООО ЭБС Лань. - Санкт-Петербург, [2022]. - URL: <https://e.lanbook.com>. - Режим доступа: для зарегистрир. пользователей. - Текст:электронный.

1.6. ЭБС Znanium.com: электронно-библиотечная система:сайт / ООО Знаниум. - Москва, [2022]. - URL: <http://znanium.com>. - Режим доступа : для зарегистрир. пользователей. - Текст : электронный.

1.7. ClinicalCollection: научно-информационная база данных EBSCO// EBSCOhost: [портал]. - URL: <http://web.b.ebscohost.com/ehost/search/advanced?vid=1&sid=9f57a3e1-1191-414b-8763-e97828f9f7e1/o40sessionmgr102> . - Режим доступа:для авториз. пользователей. - Текст : электронный.

1.8. База данных «Русский как иностранный» : электронно-образовательный ресурс для иностранных студентов : сайт / ООО Компания «Ай Пи Ар Медиа». - Саратов, [2022]. — URL: <https://ros-edu.ru>. - Режим доступа: для зарегистрир. пользователей. - Текст : электронный.

2. **КонсультантПлюс**[Электронный ресурс]: справочная правовая система. /ООО «Консультант Плюс» - Электрон, дан. - Москва:КонсультантПлюс, [2022].

##### 3. Базы данных периодических изданий:

3.1. База данных периодических изданий EastView: электронные журналы / ООО ИВИС. - Москва, [2022]. - URL: <https://dlib.eastview.com/browse/udb/12>. - Режим доступа:для авториз. пользователей. - Текст:электронный.

