

MINISTRY OF SCIENCE AND HIGHER EDUCATION OF THE RUSSIAN FEDERATION Federal State Autonomous Educational Institution of Higher Education

"Far Eastern Federal University"

(FEFU)

INSTITUTE (SCHOOL) OF LIFE SCIENCES AND BIOMEDICINE (SCHOOL)

AGREED
Head of OP

Yu.S. Khoung-heako
(signature)
December 21, 2021

APPROVE Director of the Department of Pharmacy and Pharmacology

E.V. Khozhaenko (signature) (I.O. Surname)
December 21, 2021

WORKING PROGRAM OF THE DISCIPLINE

information technology in healthcare Area of study 32.04.01 Public health

Master's program "Leadership and governance in public health (program in English for foreign citizens)" Form of training: full-time

course 1 semester 1 lectures are not provided practical classes 36 hours. including with the use of MAO lek.0 hours / practice. 10 o'clock total classroom hours 36 hours. including using MAO 10 hours independent work 72 hours. including 45 hours to prepare for the exam. exam 1 semester

The work program was compiled in accordance with the requirements of the Federal State Educational Standard in the field of study 32.04.01 Public Health, approved by order of the Ministry of Education and Science of Russia dated 31.05.2017 No. 485.

The work program was discussed at the meetingDepartment of Pharmacy and Pharmacology, Protocol No. 4 dated December 21, 2021

Director of the Department Ph.D., E.V. Khozhaenko

1. The work program v	was revised at a meeting of the Department / department / department (implementing the
discipline) and approve	d at a meeting of the Department / department / department (issuing structural unit), protocol
dated ""	2021 No
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dated ""	2021 No
3. The work program	was revised at a meeting of the Department / department / department (implementing the
discipline) and approve	d at a meeting of the Department / department / department (issuing structural unit), protocol
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	2021 No
	
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dated "	2021 No

I. Goals and objectives of mastering the discipline:

The course "Information Technologies in Healthcare" was developed for 1st year master's students in the direction 32.04.01 "Public Health". The labor intensity of the discipline is 108 hours, of which practical training is 36 hours, independent work is 72 hours, of which 45 hours are for preparing for the exam. The discipline is implemented in the 1st semester. The form of discipline control is an exam.

The teaching of the course is connected with other disciplines of the program: "Health Economics", "Biostatistics".

Target disciplines: acquaintance of the student with modern information technologies

Discipline tasks:

- To get acquainted with the basic concepts of information and information technology;
- to study the subject and main ways of organizing information technology,
 automated information technology;
- to acquaint with the evolution and development prospects of information technologies, their role in the technologization of social space;
- to study the patterns of the flow of information processes in artificial systems (including control systems), criteria for evaluating information technologies;
- master the organization of network information technologies based on modern communication tools;
- to study the integration of different types and classes of information technologies in the implementation of information processes.

Universal competencies of graduates and indicators of their achievement:

Task type	Code and name of professional competence (result of development)	Code and name of the indicator of achievement of competence
	UK-1 Able to carry out a critical analysis of problem situations based on a systematic approach, develop an action strategy	UK-1.1 Knows the basics of planning and organizing measures to ensure the protection of public health based on a systematic approach, followed by the development of an action strategy to overcome problem situations UK-1.2 Knows how to properly justify the implementation of measures to ensure the protection of public health, draw up official medical documents, resolve problem situations based on a systematic approach, develop an action strategy

Task type	Code and name of professional competence (result of development)	Code and name of the indicator of achievement of competence
		UK-1.3 Has the ability to formulate the tasks of planning and organizing measures to ensure the protection of public health by conducting a critical analysis of problem situations in a medical organization based on a systematic approach, followed by the development of an action strategy

Code and name of the indicator of	Name of the assessment indicator
achievement of competence	(the result of training in the discipline)
UK-1.1 Knows the basics of	Knows the basics of planning and organizing measures to
planning and organizing measures	ensure the protection of public health based on a
to ensure the protection of public	systematic approach, followed by the development of an
health based on a systematic	action strategy to overcome problem situations
approach, followed by the	Able to plan and organize activities to ensure the
development of an action strategy	protection of public health based on a systematic approach;
to overcome problem situations	is able to determine the strategy of action to overcome
	problem situations in their professional field
	Possesses the skill of planning and organizing activities to
	ensure the protection of public health based on a
	systematic approach
UK-1.2 Knows how to properly	Knows the methods of protecting human health, the main
justify the implementation of	problem situations in his subject area
measures to ensure the protection	Knows how to justify the implementation of measures to
of public health, draw up official	ensure the protection of public health, properly draw up
medical documents, resolve	official medical documents, resolve problem situations
problem situations based on a	based on a systematic approach, develop an action
systematic approach, develop an	strategy; knows how to draw up official medical
action strategy	documents, resolve problem situations based on a
	systematic approach, develop an action strategy
	Has the skill to carry out activities to ensure the protection
	of public health, properly
UK-1.3 Has the ability to formulate	Knows the principles of organizing applied and practical
the tasks of planning and	projects and other activities to study and model social,
organizing measures to ensure the	economic, epidemiological and other conditions that affect
protection of public health by	the health and quality of life of the population based on a
conducting a critical analysis of	systematic approach
problem situations in a medical	Able to carry out applied and practical projects and other
organization based on a systematic	activities to study and model social, economic,
approach, followed by the	epidemiological and other conditions that affect the health
development of an action strategy	and quality of life of the population, to carry out a critical
	analysis of problem situations on the basis of a systematic
	approach
	Has the skills to organize applied and practical projects
	and other activities to study and model social, economic,

epidemiological and other conditions that affect the health and quality of life of the population, critical analysis of problem situations in a medical organization based on a
systematic approach, followed by the development of an
action strategy

General professional competencies of graduates and indicators of their achievement:

Task type	Code and name of professional competence (result of development)	Code and name of the indicator of achievement of competence
	GPC-2 The ability to use information technology in professional activities, to comply with the basic	GPC-2.1 Knows and is able to explain the use of information technology
	requirements of information security	GPC-2.2 Knows how to justify the criteria for evaluating IT technologies in practice
		GPC-2.3 Has the ability to formulate and explain the need for the use of information technology in the work of medical organizations in compliance with the basic requirements of information security

Code and name of the indicator of	Name of the assessment indicator
achievement of competence	(the result of training in the discipline)
GPC-2.1 Knows and is able to	Knows modern information technologies and software
explain the use of information	used in professional activities
technology	Able to apply modern information technologies and
	software in solving professional problems.
	Possesses the skills of collecting, processing, evaluating
	the reliability of the results and providing the information
	received through modern information technologies and
	software
GPC-2.2 Knows how to justify the	Knows the criteria for evaluating IT technologies in his
criteria for evaluating IT	practice
technologies in practice	Knows how to substantiate the criteria for evaluating IT
	technologies in practice
	Possesses the skill of substantiating the criteria for
	evaluating IT technologies in practice
GPC-2.3 Has the ability to	Knows the principles of using information technology
formulate and explain the need for	Able to apply knowledge on the use of information
the use of information technology	technology in practice in compliance with the basic
in the work of medical	requirements of information security
organizations in compliance with	Has skills in working with information technologies in
the basic requirements of	healthcare in compliance with the basic requirements of

information security	information security
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For the formation of the above competencies within the discipline "Information technology in healthcare" the following methods of active / interactive learning are used: practical exercises - debate, round table (preparation and discussion of abstracts).

II. The complexity of the discipline and types of training sessions in the discipline

The total labor intensity of the discipline is 3 credit units (108 academic hours). (1 credit unit corresponds to 36 academic hours)

Designation	Types of training sessions and work of the student
Etc	Practical lessons
Right electr.	
SR:	Independent work of the student during the period of theoretical training
including	Independent work of the student and contact work of the student with the teacher
control	during the period of intermediate certification
	And other types of work

Discipline structure: Full-time form of education

N	N Section name		The number of hours by type of training sessions and work of the student						Forms of
0.	4	me ster	Lek	lab	Etc	OK	SR	Cont rol	intermediate certification
1	Formulas and functions. Charts and Graphs				3		3		
2	Computer viruses and antivirus programs				3		3	45	
3	Working with Microsoft Office Excel 2007. Working with worksheets				3		3	43	
4	Microsoft Excel 2007. Cell formats, functions, working with blocks				3		3		

5	Creation of websites				6		3		
6	Microsoft Office Word 2007. Working with tables and images				6		4		
7	Microsoft Office Word 2010. Additional Features				6		4		
8	Microsoft Office Word 2007. Document merging				6		4		
	Total:	1	-	-	36	-	27	45	Exam

III. STRUCTURE AND CONTENT OF THE THEORETICAL PART OF THE COURSE

Lectures are not included in the curriculum.

IV. STRUCTURE AND CONTENT OF THE PRACTICAL PART OF THE COURSE AND INDEPENDENT WORK

Practical lessons

(18 hours, including using MAO - 10 hours).

Lesson 1. Formulas and functions. Diagrams and graphs (2 hours)

The purpose of the lesson: to learn how to apply formulas, use the AVERAGE, MIN, MAX, IF, RANK functions; learn different ways to call functions; learn how to build graphs and charts using tabular data.

Lesson 2. Computer viruses and anti-virus programs (2 hours)

The purpose of the lesson: to study the classification of viruses, how they spread, how to deal with them; to study the classification and purpose of anti-virus programs.

Lesson 3: Working with Microsoft Office Excel 2007. Working with worksheets(2 hours)

Purpose of the lesson:Checking the level of formation of basic skills in working with spreadsheets. Acquaintance with general information about

managing workbook sheets, deleting, renaming sheets. Formulas that refer to cells in another sheet of the workbook. Diagram Wizard. Selection of table cells that are not adjacent.

Lesson 4. Microsoft Excel 2007. Cell formats, functions, working with blocks (2 hours)

Lesson objective: Creating Microsoft Excel documents. Functions. Working with blocks.

Lesson 5: Creating websites (2 hours)

The purpose of the lesson: The student creates his own website on a free hosting.

Lesson 6 - Microsoft Office Word 2007 - Working with tables and images (2 hours)

Purpose of the lesson: make an advertisement for posting on bulletin boards. Learn how to work with tables and images in Word

Lesson 7: Microsoft Office Word 2010 Advanced Features (3 hours)

Purpose of the lesson: Learn how to work with multi-level lists, formulas, headers and footers, shapes, and SmartArt.

Lesson 8: Microsoft Office Word 2007: Merging Documents (3 hours) Purpose of the lesson:

- 1. Setting up the main document.
- 2. Connecting a document to a data source.
- 3. Refine the list of recipients or items.
- 4. Adding text placeholders (merge fields) to the document.
- 5. Merge preview and completion.

Schedule for the implementation of independent work on the discipline

No. p/p	Date/Due dates	Type of independent work	Approximate lead times	form of control
1	1-6th week	Preparation of abstracts	13 hours	Protection
2	7-12th week	Presentation preparation	14 hours	Protection
3	13-18 weeks	Exam preparation	45 hours	Exam

Independent work of students consists of preparing for practical classes, working on recommended literature, writing reports on the topic of the seminar, preparing presentations, abstracts.

The teacher offers each student individual and differentiated tasks. Some of them can be carried out in a group (for example, preparing a report and presentations on the same topic can be done by several students with a division of their duties - one prepares a scientific and theoretical part, and the second analyzes practice).

Recommendations for independent work of students

The purpose of the student's independent work is to work meaningfully and independently first with educational material, then with scientific information, lay the foundations for self-organization and self-education in order to instill the ability to continuously improve their professional qualifications in the future.

The process of organizing independent work of students includes the following stages:

- •preparatory (defining goals, drawing up a program, preparing methodological support);
- •the main one (implementation of the program, use of methods of information search, assimilation, processing, application, transfer of knowledge, fixing the results, self-organization of the work process);
- •final (assessment of the significance and analysis of the results, their systematization, evaluation of the effectiveness of the program and methods of work, conclusions about the directions of labor optimization).

In the process of independent work, the student acquires the skills of self-organization, self-control, self-government, self-reflection and becomes an active independent subject of educational activity. Independent work of students should have an important impact on the formation of the personality of a future specialist; it is planned by the student independently. Each student independently determines the mode of his work and the measure of labor expended on mastering the educational content in each discipline. He performs extracurricular work according to a personal individual plan, depending on his preparation, time and other conditions.

Methodological recommendations for independent work of students

As the material is mastered on the subject of the discipline, it is envisaged to carry out independent work of students in collecting and processing literary material to expand the field of knowledge in the discipline being studied. To study and fully master the program material in the discipline, educational, reference and

other literature recommended by this program, as well as specialized periodicals, are used.

In self-preparation, students take notes on the material, independently study questions on the topics covered, using educational literature from the proposed list, periodicals, scientific and methodological information, databases of information networks (Internet, etc.).

Independent work consists of such types of work as work with lecture notes; studying material from textbooks, reference books, videos and presentations, as well as other reliable sources of information; exam preparation.

List of types of independent work

Preparation for a practical lesson, preparation of a report on a selected aspect of the topic of a practical lesson or selection of practical material for participation in the discussion constitute the content of the master's independent work. Lecture notes, professional literature, educational and methodological support of the discipline can become the material for preparation. Forms of current control: survey, group discussion, control tasks, report presentation.

One of the necessary components for the successful development of the course is writing an essay.

Search and study of the latest theoretical and applied sources on social management in Internet resources.

Guidelines

Execution form: writing an abstract.

Execution Criteria:Requirements for the design and implementation of the abstract:

- the volume of the abstract should be within 10-15 printed pages (appendices to the work are not included in the volume of the abstract);
- when developing an abstract, it is recommended to use 8-10 different sources
- the abstract must be executed competently, in compliance with the culture of presentation;
- in the course of the presentation of the text, there should be references to the literature used;
 - correct bibliography.

The structure of the abstract should include a title page, a table of contents (a sequential presentation of sections of the abstract indicating the page from which it

begins), an introduction (formulating the essence of the problem under study, determining the relevance, goals and objectives of the abstract), the main part (each section of this part of the abstract evidently reveals a separate problem or one of its sides, is a logical continuation of the previous one; this part can contain tables, diagrams, graphs, figures, etc.), conclusion (summarizes or gives a generalized conclusion on the topic of the abstract, recommendations are offered), bibliography.

Delivery deadlines: at the last cycle.

If the abstract meets all the requirements for design and content, then the student receives a maximum of 100 points for its implementation. If the abstract is made with minor flaws, such as using fewer sources or not fully disclosing certain issues, then the student receives 75-99 points. If the teacher believes that the topic is only half disclosed, but the main issues of the topic are still touched upon, only one or two sources are used, then the student receives 50-74 points. If the topic of the abstract is not disclosed, there are no references to the literature, and the student does not answer the questions asked on the abstract, then the score for the abstract is not set.

Essay topics

- 1. Emergence and development of modern information technologies.
- 2. Main components and purposes of modern information technologies.
- 3. Classification, composition, main functions and characteristics of modern software.
- 4. Basic methods for forecasting information processes using the spreadsheet Excel.
 - 5. Databases in health systems.
 - 6. Communication information technologies.
- 7. Information technologies for the study of financial and economic activities of health care facilities.
- 8. Information technologies for forecasting the activities of medical facilities.
 - 9. Computer networks as the main way to use IT.
 - 10. Internet search engines. Structure and principles of work.

Criteria for assessing the independent work of undergraduates

Evaluation of independent work is carried out according to the following criteria:

• the completeness and quality of the tasks performed;

- possession of methods and techniques of computer modeling in the issues under study, the use of software tools;
- the quality of the report design, the use of rules and standards for the design of text and electronic documents;
- use of data from domestic and foreign literature, Internet sources, regulatory information and best practices;
 - absence of factual errors related to understanding the problem.

When assessing the knowledge of undergraduates, not only the amount of knowledge is taken into account, but, first of all, the quality of assimilation of the material, understanding the logic of the academic discipline, the ability to freely, competently, logically present what has been learned is evaluated, the ability to reasonably defend one's own point of view.

"Excellent" marks the answer to independent tasks, in which the material is systematically, logically and consistently presented.

The "good" rating implies knowledge of the material and the ability to draw independent conclusions, comment on the material presented; answer with minor flaws.

Assimilation of the material is assessed as "satisfactory" when the master has not studied some sections in depth, allows fuzzy formulations, and gives incomplete answers.

"Unsatisfactory" is put in the case when the master does not know a significant part of the educational material, makes significant mistakes; knowledge is unsystematic.

V. EDUCATIONAL AND METHODOLOGICAL PROVISION OF STUDENTS' INDEPENDENT WORK

Independent work is defined as an individual or collective learning activity carried out without the direct guidance of a teacher, but according to his instructions and under his control. Independent work is a cognitive learning activity, when the sequence of a student's thinking, his mental and practical operations and actions depends and is determined by the student himself.

Independent work of students contributes to the development of independence, responsibility and organization, a creative approach to solving problems at the educational and professional levels, which ultimately leads to the development of the skill of independent planning and implementation of activities.

The purpose of independent work of students is to master the necessary

competencies in their field of study, experience in creative and research activities.

Forms of independent work of students:

- work with basic and additional literature, Internet resources;
- self-acquaintance with the lecture material presented on electronic media in the library of an educational institution;
- preparation of abstract reviews of sources of periodicals, reference notes, predetermined by the teacher;
- search for information on the topic with its subsequent presentation to the audience in the form of a report, presentations;
 - preparation for the implementation of classroom control work;
 - performance of home control works;
 - performance of test tasks, problem solving;
 - drawing up crossword puzzles, schemes;
 - preparation of reports for presentation at a seminar, conference;
 - filling out a workbook;
 - essay writing, term paper;
 - preparation for business and role-playing games;
 - compiling a resume;
 - preparation for tests and exams;
- other kinds activities, organized And carried out educational institution and student self-government bodies.

VI. CONTROL OF ACHIEVEMENTS OF THE GOALS OF THE COURSE

No	Controlled modules			Appraisal tools - name	
. p /p	/ sections / topics of the discipline	Codes and formation competencie	of	current control	intermediate certification
1	Formulas and functions. Charts	UK-1.1; UK-1.2;	Knows	Interview UO-1, abstract PR-4	Exam Questions 1-2
	and Graphs	UK-1.3; GPC-2.1; GPC-2.2;	Can	Tests PR-1, essay PR-3, situational case-tasks PR-11, presentation	
		GPC-2.3	owns	Work in small groups, reports of UR-3	
		UK-1.1; UK-1.2;	Knows	Interview UO-1, abstract PR-4	Exam Questions 3-4
2	Computer viruses and antivirus programs	UK-1.3; GPC-2.1; GPC-2.2;	Can	Tests PR-1, essay PR-3, situational case-tasks PR-11, presentation	
		GPC-2.3	owns	Work in small groups, reports of UR-3	
3	Working with Microsoft Office	UK-1.1; UK-1.2;	Knows	Interview UO-1, abstract PR-4	Exam Questions 5-6
	Excel 2007.	UK-1.3;	Can	Tests PR-1, essay PR-3,	

	Working with worksheets	GPC-2.1; GPC-2.2; GPC-2.3	owns	situational case-tasks PR-11, presentation Work in small groups, reports	
		UK-1.1; UK-1.2;	Knows	of UR-3 Interview UO-1, abstract PR-4	Exam Questions 7-8
4	Microsoft Excel 2007. Cell formats, functions, working	UK-1.3; GPC-2.1; GPC-2.2;	Can	Tests PR-1, essay PR-3, situational case-tasks PR-11, presentation	
	with blocks	GPC-2.3	owns	Work in small groups, reports of UR-3	
		UK-1.1; UK-1.2;	Knows	Interview UO-1, abstract PR-4	Exam Questions 9-
5	Creation of websites	UK-1.3; GPC-2.1; GPC-2.2;	Can	Tests PR-1, essay PR-3, situational case-tasks PR-11, presentation	10
		GPC-2.3	owns	Work in small groups, reports of UR-3	
	Microsoft Office	UK-1.1; UK-1.2;	Knows	Interview UO-1, abstract PR-4	Exam Questions 11-
6	Word 2007. Working with tables and images	UK-1.3; GPC-2.1; GPC-2.2; GPC-2.3	Can	Tests PR-1, essay PR-3, situational case-tasks PR-11, presentation	12
			owns	Work in small groups, reports of UR-3	
		UK-1.1; UK-1.2;	Knows	Interview UO-1, abstract PR-4	Exam Questions 13-
7	Microsoft Office Word 2010. Additional Features	Vord 2010. GPC-2.1; additional Features GPC-2.2;	Can	Tests PR-1, essay PR-3, situational case-tasks PR-11, presentation	14
		GPC-2.3	owns	Work in small groups, reports of UR-3	
		UK-1.1; UK-1.2;	Knows	Interview UO-1, abstract PR-4	Exam Questions 15-
8	Word 2007. G	UK-1.3; GPC-2.1; GPC-2.2;	Can	Tests PR-1, essay PR-3, situational case-tasks PR-11, presentation	16
		GPC-2.3	owns	Work in small groups, reports of UR-3	

VII. EDUCATIONAL AND METHODOLOGICAL SUPPORT OF DISCIPLINE

Main literature

1. Parfenova E.V. Information technologies [Electronic resource]: laboratory workshop / E.V. Parfenov. — Electron. text data. - M.: MISiS Publishing House, 2018. - 56 p. — 2227-8397. - Access mode: http://www.iprbookshop.ru/78565.html

- 2.Zhuravleva T.Yu. Information technologies [Electronic resource]: study guide / T.Yu. Zhuravlev. Electron. text data. Saratov: Higher education, 2018. 72 p. 978-5-4487-0218-1. Access mode:http://www.iprbookshop.ru/74552.html
- 3. Govorova S.V. Information technologies [Electronic resource]: laboratory workshop / S.V. Govorova, M.A. Lapin. Electron. text data. Stavropol: North Caucasian Federal University, 2016. 168 p. 2227-8397. Access mode: http://www.iprbookshop.ru/66066.html
- 4. Information technologies [Electronic resource]: study guide / D.N. Afonichev [i dr.]. Electron. text data. Voronezh: Voronezh State Agrarian University. Emperor Peter the Great, 2016. 268 p. 2227-8397. Access mode: http://www.iprbookshop.ru/72674.html
- 5. Shandrikov A.S. Information technologies [Electronic resource]: study guide / A.S. Shandrikov. Electron. text data. Minsk: Republican Institute of Vocational Education (RIPO), 2015. 444 p. 978-985-503-530-6. Access mode: http://www.iprbookshop.ru/67636.html
- 6. Information technology in management: Textbook / V.I. Karpuzova, E.N. Skripchenko, K.V. Chernysheva, N.V. Karpuzov. 2nd ed., add. M.: Vuzovsky textbook: NITs INFRA-M, 2014. 301 p.: 60x90 1/16. (p) ISBN 978-5-9558-0315-9 Access mode: http://znanium.com/catalog/product/410374

additional literature

- 1. Basic and applied information technologies: Textbook / Gvozdeva V. A. M .: ID FORUM, SIC INFRA-M, 2016. 384 p.http://lib.dvfu.ru:8080/lib/item?id=Znanium:Znanium-504788&theme=FEFU
- 2. Kobrinsky B.A., Zarubina T.V. Medical informatics. Academy, 2013. 192 p.http://lib.dvfu.ru:8080/lib/item?id=chamo:731738&theme=FEFU
- 3.Information technologies: textbook. allowance / G.N. Isaev. 2nd ed., erased. M.: Publishing house "Omega-L", 2013. 464 p. Access mode:http://www.studentlibrary.ru/book/ISBN9785370023996.html
- 4. Berezin S. Ya. Fundamentals of cybernetics and control in biological and medical systems. TNT, 2012. 244 p.http://lib.dvfu.ru:8080/lib/item?id=chamo:667105&theme=FEFU
- 5. Kireeva G.I., Kurushin V.D., Mosyagin A.B., Nechaev D.Yu., Chekmarev Yu.V. Fundamentals of information technology: textbook. allowance. M.: DMK Press. 272 p. Access mode:http://www.studentlibrary.ru/book/ISBN9785940744580.html

6. Makarova N.V. Informatics: textbook - M .: Finance and statistics.-2010.

– 768 p. Access mode:http://www.studentlibrary.ru/book/ISBN9785279022020.html

The list of resources of the information and telecommunication network "Internet", necessary for the development of the discipline

- 1.Patent database and patent searchhttp://www.freepatent.ru/
- 2.Internet health portalhttp://bio-x.ru/go.mail.ru/search?rf=e.mail.ru&fm=1&us=15&usln=3&usstr=health&usqid=7 d41348ea69338f3&hasnavig=1&sbmt=1509229987234&q=health
- 3.Site researchhttps://infopedia.su/4x3e87.html; https://dic.academic.ru/dic.nsf/ruwiki/663252
 - 4. SSAU electronic library -http://library.sgau.ru
 - 5.NEB -http://elibrary.ru
 - 6.http://edu.znate.ru/docs/3997/index-94535-6.html
 - 7. Student library http://www.studmedlib.ru

List of information technologies and software

- Microsoft Office Professional Plus 2010;
- an office suite that includes software for working with various types of documents (texts, spreadsheets, databases, etc.);
 - -7Zip 9.20 free file archiver with a high degree of data compression;
 - -ABBYY FineReader 11 software for optical character recognition;
- -Adobe Acrobat XI Pro a software package for creating and viewing electronic publications in PDF format;
- -ESET Endpoint Security comprehensive protection of workstations based on Windows OS. Virtualization support + new technologies;
- -WinDjView 2.0.2 is a program for recognizing and viewing files with the same name format DJV and DjVu.

Use of site videoshttps://infopedia.su/4x3e87.html;https://dic.academic.ru/dic.nsf/ruwiki/6632
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VIII. METHODOLOGICAL INSTRUCTIONS FOR MASTERING THE DISCIPLINE

The theoretical part of the discipline "Information technologies in health care" is revealed in practical classes, where the teacher gives the basic concepts of the discipline.

The sequence of presentation of the material in practical classes is aimed at the formation of an indicative basis for students for the subsequent assimilation of the material during independent work.

Practical classes of the course are held in all sections of the curriculum. Practical work is aimed at developing students' skills of independent research work. During practical classes, the master performs a set of tasks that allows you to consolidate the lecture material on the topic under study.

Active consolidation of theoretical knowledge is facilitated by the discussion of problematic aspects of the discipline in the form of a seminar and classes using active learning methods. At the same time, the development of skills of independent research activity in the process of working with scientific literature, periodicals, the formation of the ability to reasonably defend one's point of view, listen to others, answer questions, and lead a discussion take place.

Practical lessonsfocused on the most fundamental and problematic issues and are designed to stimulate the development of their own position on these topics.

In working with students, a variety of means, forms and methods of teaching (information-developing, problem-search) are used: the method of scientific discussion, a conference or a round table, an analysis of specific educational situations (case study).

Conference or round table

When using this method, you can invite various specialists involved in the study of the problem under consideration or working on a topic studied by students. These can be scientists, economists, artists, representatives of public organizations, government agencies, etc.

Before such a meeting, the teacher invites students to put forward a problem of interest to them on this topic and formulate questions for their discussion. If students find it difficult, the teacher can suggest a number of problems and, together with the students, choose a more interesting one for them. Selected questions are transferred to the invited expert of the round table to prepare for the presentation and answers. At the same time, several specialists involved in the study of this problem can be invited to the "round table". In order for the round table meeting to be active and interested, it is necessary to encourage listeners to exchange views and maintain an atmosphere of free discussion.

When applying all these forms of classes, students get a real practice of formulating their point of view, comprehending the system of argumentation, that is, turning information into knowledge, and knowledge into beliefs and views.

The collective form of interaction and communication teaches students to formulate thoughts in a professional language, to speak orally, to listen, hear and understand others, to argue correctly and reasonably. Joint work requires not only individual responsibility and independence, but also self-organization of the work of the team, exactingness, mutual responsibility and discipline. At such seminars, the subject and social qualities of a professional are formed, the goals of training and educating the personality of a future specialist are achieved.

The features of collective mental activity are that there is a rigid dependence of the activity of a particular student on a fellow student; it helps to solve the psychological problems of the team; there is a "transfer" of action from one participant to another; self-management skills develop.

There are various forms of organizing and conducting this type of training, such as a press conference.

At the previous lesson, the teacher gives the task to students to individually answer the questions of the practical lesson and collectively discuss options for solving the same situation, which significantly deepens the experience of the trainees. Faced with a specific situation, the student must determine whether there is a problem in it, what it consists of, determine their attitude to the situation. At the same time, each student must, by getting used to the role of specific historical figures, analyze the causes, course and results of the events. The practical lesson begins with an introductory speech by the teacher, in which the problems for discussion are voiced. As the discussion proceeds, each of the students has the opportunity to get acquainted with the solutions, listen and weigh their many assessments, additions, changes, enter into a dialogue and discussion.

As the questions of the practical lesson are discussed, the analytical abilities of the trainees develop, contribute to the correct use of the information at their disposal, develop independence and initiative in decisions.

At the final stage of the lesson, the teacher, correcting the conclusions on the performances of students, draws general conclusions for each practical task and the overall result for the entire lesson.

Method of scientific discussion

The academic group is divided into two subgroups - generators and critics of ideas. Three more people stand out - expert analysts.

The practical lesson is implemented in four stages:

The first is preparatory (carried out 1-2 weeks before the practical session). The teacher instructs about the purpose, content, nature, rules of participation in the game. Student preparation includes:

- determination of the purpose of the lesson, specification of the educational task;
- planning the general course of the lesson, determining the time of each stage of the lesson;
- development of criteria for evaluating the proposals and ideas received, which will make it possible to purposefully and meaningfully analyze and summarize the results of the lesson.

Mutual criticisms and evaluations are strictly prohibited; they hinder the emergence of new ideas. You should refrain from actions, gestures that may be misinterpreted by other participants in the session. No matter how fantastic or incredible the idea put forward by any of the participants in the session, it should be met with approval. The more proposals put forward, the greater the likelihood of a new and valuable idea.

The second - the lesson begins with the fact that the generators of ideas quickly and clearly characterize the ruler, the situation in the country and express all proposals for solving the named problem;

Third - critics of ideas "attack" - select the most valuable, progressive of them, analyze, evaluate, criticize and include in the list of relevant assumptions that provide a solution to the problem;

Fourth - experts analyze and evaluate the activities of both subgroups, the significance of the ideas put forward.

The goal of the teacher is to organize collective mental activity to find non-traditional ways to solve problems, when discussing controversial issues, hypotheses, problematic or conflict situations.

When writing essays, it is recommended to independently find literature for it. The abstract reveals the content of the problem under study. Working on an essay helps to deepen the understanding of individual issues of the course, form and defend one's point of view, acquire and improve the skills of independent creative work, and conduct active cognitive work.

An interview and a survey are conducted to conduct ongoing monitoring and intermediate certification.

IX. LOGISTICS AND TECHNICAL SUPPORT OF THE DISCIPLINE

The educational process in the discipline is carried out in the lecture, computer classes of the FEFU campus, equipped with computers and multimedia systems, with a connection to the FEFU corporate network and the Internet, the simulation center of the FEFU School of Biomedicine.

The material and technical support for the implementation of the discipline includes classrooms for lectures and practical classes, equipped with multimedia support and corresponding to sanitary and contrary rules and regulations.

	·
Name of equipped premises	Tint of main a main man
and premises for independent	List of main equipment
work	
690922, Primorsky Territory,	Computer class for 22 workplaces:
Vladivostok, Russian Island,	HP ProOpe 400 All-in-One 19.5 (1600x900), Core i3-4150T,
Saperny Peninsula, Ayaks	4GB DDR3-1600 (1x4GB), 1TB HDD 7200 SATA, DVD+/-RW,
settlement, 10,	GigEth, Wi-Fi, W, usb kbd/ mse, Win7Pro(64-
room M612, area 47.2 m ²	bit)+Win8.1Pro(64-bit), 1-1-1 Wty (25 pcs.)
690922, Primorsky Territory,	Multimedia Audience:
Vladivostok, Russian Island,	Motorized Screen 236*147cm Trim Screen Line; Projector DLP,
Saperny Peninsula, Ayaks	3000 ANSI Lm, WXGA 1280x800, 2000:1 EW330U Mitsubishi;
village, 10, School of	document camera CP355AF Avervision, video camera MP-
Biomedicine, room M 419,	HD718 Multipix; Subsystem of specialized equipment fastenings
area 74.9 m ²	CORSA-2007 Tuarex; Video switching subsystem: Audio
	switching and sound amplification subsystem: power amplifier,
	wireless LAN based on 802.11a/b/g/n 2x2 MIMO(2SS) access
	points.
Reading rooms of the FEFU	HP ProOpe 400 All-in-One 19.5 (1600x900), Core i3-4150T,
Scientific Library with open	4GB DDR3-1600 (1x4GB), 1TB HDD 7200 SATA, DVD+/-
access to the fund (building A -	RW,GigEth,Wi-Fi,BT,usb kbd/mse,Win7Pro (64-
level 10)	bit)+Win8.1Pro(64-bit),1-1-1 Wty Internet access speed 500
	Mbps.
	Workplaces for people with disabilities are equipped with Braille
	displays and printers; equipped with: portable devices for reading
	flat-print texts, scanning and reading machines, a video enlarger
	with the ability to regulate color spectra; magnifying electronic
	loupes and ultrasonic markers

X. VALUATION FUND FOS passport

Universal competencies of graduates and indicators of their achievement:

Task type	Code and name of professional competence	Code and name of the indicator of achievement of competence
	(result of development)	

Task type	Code and name of professional competence (result of development)	Code and name of the indicator of achievement of competence
	UK-1 Able to carry out a critical analysis of problem situations based on a systematic approach, develop an action strategy	UK-1.1 Knows the basics of planning and organizing measures to ensure the protection of public health based on a systematic approach, followed by the development of an action strategy to overcome problem situations UK-1.2 Knows how to properly justify the implementation of measures to ensure the protection of public health, draw up official medical documents, resolve problem situations based on a systematic approach, develop an action strategy UK-1.3 Has the ability to formulate the tasks of planning and organizing measures to ensure the protection of public health by conducting a critical analysis of problem situations in a medical organization based on a systematic approach, followed by the development of an action strategy

Code and name of the indicator of	Name of the assessment indicator
achievement of competence	(the result of training in the discipline)
UK-1.1 Knows the basics of planning and organizing measures to ensure the protection of public health based on a systematic approach, followed by the development of an action strategy to overcome problem situations	Knows the basics of planning and organizing measures to ensure the protection of public health based on a systematic approach, followed by the development of an action strategy to overcome problem situations Able to plan and organize activities to ensure the protection of public health based on a systematic approach; is able to determine the strategy of action to overcome problem situations in their professional field Possesses the skill of planning and organizing activities to ensure the protection of public health based on a systematic approach
UK-1.2 Knows how to properly justify the implementation of measures to ensure the protection of public health, draw up official medical documents, resolve problem situations based on a systematic approach, develop an action strategy	Knows the methods of protecting human health, the main problem situations in his subject area Knows how to justify the implementation of measures to ensure the protection of public health, properly draw up official medical documents, resolve problem situations based on a systematic approach, develop an action strategy; knows how to draw up official medical documents, resolve problem situations based on a systematic approach, develop an action strategy Has the skill to carry out activities to ensure the protection of public health, properly
UK-1.3 Has the ability to formulate	Knows the principles of organizing applied and practical

the tasks of planning and projects and other activities to study and model social, economic, epidemiological and other conditions that affect organizing measures to ensure the protection of public health by the health and quality of life of the population based on a conducting a critical analysis of systematic approach problem situations in a medical Able to carry out applied and practical projects and other organization based on a systematic activities to study and model social, economic, approach, followed by the epidemiological and other conditions that affect the health development of an action strategy and quality of life of the population, to carry out a critical analysis of problem situations on the basis of a systematic approach Has the skills to organize applied and practical projects and other activities to study and model social, economic, epidemiological and other conditions that affect the health and quality of life of the population, critical analysis of problem situations in a medical organization based on a systematic approach, followed by the development of an action strategy

General professional competencies of graduates and indicators of their achievement:

Task type	Code and name of professional competence (result of development)	Code and name of the indicator of achievement of competence
	GPC-2 The ability to use information technology in professional activities, to comply with the basic	GPC-2.1 Knows and is able to explain the use of information technology
	requirements of information security	GPC-2.2 Knows how to justify the criteria for evaluating IT technologies in practice
		GPC-2.3 Has the ability to formulate and explain the need for the use of information technology in the work of medical organizations in compliance with the basic requirements of information
		security

Code and name of the indicator of	Name of the assessment indicator
achievement of competence	(the result of training in the discipline)
GPC-2.1 Knows and is able to	Knows modern information technologies and software
explain the use of information	used in professional activities
technology	Able to apply modern information technologies and
	software in solving professional problems.
	Possesses the skills of collecting, processing, evaluating
	the reliability of the results and providing the information
	received through modern information technologies and
	software

GPC-2.2 Knows how to justify the criteria for evaluating IT	Knows the criteria for evaluating IT technologies in his practice
technologies in practice	Knows how to substantiate the criteria for evaluating IT
	technologies in practice
	Possesses the skill of substantiating the criteria for
	evaluating IT technologies in practice
GPC-2.3 Has the ability to	Knows the principles of using information technology
formulate and explain the need for	Able to apply knowledge on the use of information
the use of information technology	technology in practice in compliance with the basic
in the work of medical	requirements of information security
organizations in compliance with	Has skills in working with information technologies in
the basic requirements of	healthcare in compliance with the basic requirements of
information security	information security

VI. CONTROL OF ACHIEVEMENTS OF THE GOALS OF THE COURSE

No	Controlled modules			Appraisal tools - name	
. p	/ sections / topics	Codes and	_	current control	intermediate
/ p	of the discipline	formation of			certification
1	Г 1 1	competencie	es	T	Б
1	Formulas and functions. Charts	UK-1.1; UK-1.2;	Knows	Interview UO-1, abstract PR-4	Exam Questions 1-2
	and Graphs	UK-1.2; UK-1.3;		Tests PR-1, essay PR-3,	Questions 1-2
	and Graphs	GPC-2.1;	Can	situational case-tasks PR-11,	
		GPC-2.2;	Can	presentation	
		GPC-2.3		Work in small groups, reports	
			owns	of UR-3	
		UK-1.1;		Interview	Exam
		UK-1.2;	Knows	UO-1, abstract PR-4	Questions 3-4
	Computer viruses	UK-1.3;	Can	Tests PR-1, essay PR-3,	
2	and antivirus	GPC-2.1;	Can	situational case-tasks PR-11,	
	programs	GPC-2.2;		presentation	
		GPC-2.3	owns	Work in small groups, reports	
		IIIZ 1 1.		of UR-3 Interview	Exam
	Working with	UK-1.1; UK-1.2;	Knows	UO-1, abstract PR-4	Questions 5-6
	Microsoft Office	UK-1.2; UK-1.3;		Tests PR-1, essay PR-3,	Questions 3-0
3	Excel 2007.	GPC-2.1;	Can	situational case-tasks PR-11,	
	Working with	GPC-2.2;		presentation	
	worksheets	GPC-2.3	OWING	Work in small groups, reports	
			owns	of UR-3	
		UK-1.1;	Knows	Interview	Exam
	Microsoft Excel	UK-1.2;	1110 110	UO-1, abstract PR-4	Questions 7-8
	2007. Cell formats,	UK-1.3;	Com	Tests PR-1, essay PR-3,	
4	functions, working	GPC-2.1; GPC-2.2;	Can	situational case-tasks PR-11, presentation	
	with blocks	GPC-2.2,		Work in small groups, reports	
		01 0 2.3	owns	of UR-3	
			22		

		UK-1.1; UK-1.2;	Knows	Interview UO-1, abstract PR-4	Exam Questions 9-
5	Creation of websites	UK-1.3; GPC-2.1; GPC-2.2;	Can	Tests PR-1, essay PR-3, situational case-tasks PR-11, presentation	10
		GPC-2.3	owns	Work in small groups, reports of UR-3	
	Microsoft Office	UK-1.1; UK-1.2;	Knows	Interview UO-1, abstract PR-4	Exam Questions 11-
6	Word 2007. Working with tables and images	UK-1.3; GPC-2.1; GPC-2.2;	Can	Tests PR-1, essay PR-3, situational case-tasks PR-11, presentation	12
	tables and images	GPC-2.3	owns	Work in small groups, reports of UR-3	
		UK-1.1; UK-1.2;	Knows	Interview UO-1, abstract PR-4	Exam Questions 13-
7	Microsoft Office Word 2010. Additional Features	UK-1.3; GPC-2.1; GPC-2.2;	Can	Tests PR-1, essay PR-3, situational case-tasks PR-11, presentation	14
		GPC-2.3	owns	Work in small groups, reports of UR-3	
		UK-1.1; UK-1.2;	Knows	Interview UO-1, abstract PR-4	Exam Questions 15-
8	Microsoft Office Word 2007. Document merging	UK-1.3; GPC-2.1; GPC-2.2;	Can	Tests PR-1, essay PR-3, situational case-tasks PR-11, presentation	16
		GPC-2.3	owns	Work in small groups, reports of UR-3	

Competence level assessment scale

Code and wording of competence	Stages of competence formation		criteria	indicators	Points
UK-1 Able to carry out a critical analysis of problem situations based on a systematic approach, develop an action strategy	knows (threshold level)	principles of organizing applied and practical projects and other activities for the study and modeling of social, economic, epidemiological and other conditions that affect the health and quality of life of the population	knowledge of the basics of planning and organizing measures to ensure the protection of public health based on a critical analysis of problem situations	the ability to explain the basics of planning and organizing activities to ensure the protection of public health based on a systematic approach, followed by the development of an action strategy to overcome	45-64

	can (advanced)	based on a systematic approach carry out applied and practical projects and other activities to study and model social, economic, epidemiological and other conditions that affect the health and quality of life of the population, carry out a critical analysis of problem situations based on a systematic approach skills in	the ability to properly draw up official medical documents, to carry out measures to ensure the protection of public health with a critical analysis of problematic situations based on a systematic approach	the ability to properly justify the implementation of measures to ensure the protection of public health, draw up official medical documents, resolve problem situations based on a systematic approach, develop an action strategy	65-84 85-100
ODV 2	owns (high)	organizing applied and practical projects and other activities to study and model social, economic, epidemiological and other conditions that affect the health and quality of life of the population, critical analysis of problem situations in a medical organization based on a systematic approach, followed by the development of an action strategy	possession of methods for planning and organizing measures to ensure the protection of public health based on the implementatio n of a critical analysis of problematic situations in a medical organization based on a systematic approach	the ability to formulate the tasks of planning and organizing measures to ensure the protection of public health by conducting a critical analysis of problematic situations in a medical organization based on a systematic approach, followed by the development of an action strategy	
OPK-2 The ability to use information technology in	knows (threshold level)	principles of using information technologies	knowledge of the basic concepts of information	ability to explain the use of information technology	61-70

professional activities, to comply with the basic requirements of information security			technology in research processes in medicine		
	can (advanced)	apply knowledge on the use of information technology in practice	ability to apply IT technologies in practice	the ability to substantiate the criteria for evaluating IT technologies in practice	71-84
	owns (high)	skills in working with information technologies in healthcare in compliance with the basic requirements of information security	methods of collecting, processing, analyzing information and their presentation in practice based on information security	the ability to formulate and explain the need to use information technology in the work of medical organizations in compliance with the basic requirements of information security	85-100

I. Evaluation tools for certification

Methodological recommendations that determine the procedures for evaluating the results of development disciplines

Current assessment of students. The current certification of students in the discipline "Information Technologies in Healthcare" is carried out in accordance with the local regulations of the Far Eastern Federal University and is mandatory.

The current certification in the discipline "Information Technologies in Healthcare" is carried out in the form of control measures (a written survey, defense of practical / laboratory work) to assess the actual results of master's education by the leading teacher.

The objects of assessment are:

- academic discipline (activity in the classroom, the timeliness of the implementation of various types of tasks, attendance at all types of classes in the discipline being certified);
 - the degree of assimilation of theoretical knowledge;
- the level of mastery of practical skills and abilities in all types of educational work;
 - results of independent work.

For each object, a description of the assessment procedures is given in relation to the assessment tools used.

Intermediate certification of students. Intermediate certification of students in the discipline "Information Technologies in Healthcare" is carried out in accordance with the local regulations of the Far Eastern Federal University and is mandatory.

Depending on the type of intermediate control in the discipline and the form of its organization, various criteria for assessing knowledge, skills and abilities can be used.

Intermediate certification in the discipline "Information Technologies in Healthcare" is carried out in the form of an exam in the form of a written answer.

Test and examination materials. When assessing students' knowledge, intermediate control takes into account the amount of knowledge, the quality of their assimilation, understanding the logic of the academic discipline, the place of each topic in the course. The ability to freely, competently, logically coherently present what has been studied, the ability to reasonably defend one's own point of view are assessed.

Questions for the exam

- 1. Classification of computer networks on a territorial basis: LAN, MAN, WAN networks.
 - 2. Internet. Internet addressing.
- 3.Internet Services: e-mail, mailing lists, newsgroups, world wide webWWW, file transfer service(FTP), ICQ.
 - 4. TCP/IP protocol stack.
 - 5. Search for information on the Internet.
 - 6. Popular web browsers. Search engines.
 - 7. Major foreign search engines.
 - 8. Basic Internet protocols: http, telnet, SMTP, HTTP, FTP, POP. Email.
- 9. Data protection. Information security methods: cryptography, electronic signature, authentication, certification of Web sites.
 - 10. Saving Web pages. Features of saving pages containing frames.
- 11. HTML. Interpretation of HTML tags. Basic structural elements of HTML.
 - 12. Headings. paragraphs. logical partitions. Display preformatted text.
 - 13. Lists: bulleted, numbered.
 - 14. Create hyperlinks.
 - 15. Adding graphic elements.
 - 16. Tables. Table tag attributes.

Exam Grading Criteria

8			
Exam grade	Requirements for the formed competencies		

"Great"	An "excellent" mark is given to a student if he has deeply and firmly mastered the program material, sets it out exhaustively, consistently, clearly and logically, is able to closely link theory with practice, freely copes with tasks, questions and other types of application of knowledge, and does not find it difficult to response when modifying tasks, uses monographic literature in the response, correctly substantiates the decision made, possesses versatile skills and techniques for performing practical tasks;
"Fine"	A "good" grade is given to a student if he knows the material well, presents it competently and to the point, avoiding significant inaccuracies in answering the question, correctly applies theoretical provisions in solving practical issues and tasks, possesses the necessary skills and techniques for their implementation;
"satisfactorily"	The grade "satisfactory" is given to the student if he has knowledge only of the basic material, but has not mastered its details, allows inaccuracies, insufficiently correct wording, violations of the logical sequence in the presentation of the program material, has difficulty in performing practical work;
"unsatisfactory"	The "unsatisfactory" mark is given to a student who does not know a significant part of the program material, makes significant mistakes, performs practical work uncertainly, with great difficulty.

II. Evaluation tools for current certification Abstract Evaluation Criteria

- 100-86 points are given to the student if the student expressed his opinion on the formulated problem, argued it, accurately defining its content and components. The data of domestic and foreign literature, statistical information, information of a regulatory nature are given. The student knows and owns the skill of independent research work on the research topic; methods and techniques for analyzing the theoretical and / or practical aspects of the area under study.
- 85-76 points the work is characterized by semantic integrity, coherence and consistency of presentation; no more than 1 mistake was made when explaining the meaning or content of the problem. For argumentation, data of domestic and foreign authors are given. Demonstrated research skills and abilities. There are no actual errors related to understanding the problem.
- 75-61 points the student conducts a fairly independent analysis of the main stages and semantic components of the problem; understands the basic foundations and theoretical justification of the chosen topic. The main sources on the topic under consideration are attracted. No more than 2 errors were made in the sense or content of the problem.

- 60-50 points - if the work is a retold or completely rewritten source text without any comments or analysis. The structure and theoretical component of the topic is not disclosed. Three or more than three errors were made in the semantic content of the problem being disclosed.

Control testsare intended for students studying the course "Management and Marketing in Healthcare".

When working with tests, it is proposed to choose one answer option from three to four offered. At the same time, the tests are not the same in their complexity. Among the proposed there are tests that contain several options for correct answers. The student must indicate all the correct answers.

Tests are designed for both individual and collective decision. They can be used in both classroom and self-study. The selection of tests necessary for the control of knowledge in the process of intermediate certification is made by each teacher individually.

The results of the test tasks are evaluated by the teacher on a five-point scale for attestation or according to the "pass" - "fail" system. The grade "excellent" is given with the correct answer to more than 90% of the tests proposed by the teacher. Rating "good" - with the correct answer to more than 70% of the tests. Grade "satisfactory" - with the correct answer to 50% of the proposed tests.

Test tasks

1. The SMTP protocol is for...

- a) receiving e-mail;
- b) sending email;
- c) Web browsing.

2. The FTP service on the Internet is intended for:

- a) to create, receive and transmit Web pages;
- b) for remote control of technical systems;
- c) to receive and transmit files of any format;
- d) to ensure the operation of teleconferencing.

3. The bandwidth of the information transmission channel is measured in (several answers):

- a) bit/s;
- b)Mbps;
- c) Mbps;
- d) KB/s;
- e) byte;
- f) MB

4. Routing protocol (IP) provides:

- a) control of data transmission equipment and communication channels;
- b) preservation of mechanical, functional parameters of physical communication in a computer network;
 - c) data interpretation and preparation for the user level;
- d) delivery of information from the sender's computer to the recipient's computer;
- e) splitting files into IP packets during transmission and reassembling files during reception.

5. The three main requirements for computer networks are ...

- a) productivity;
- b) capacity;
- c) parallelism;
- d) reliability;
- e) throughput;
- f) integrability

6.Domain is ...

- a) unit of measure of information;
- b) the name of the program for communication between computers;
- c) part of the address that specifies the address of the user's computer on the network;
 - d) the name of the device that communicates between computers.

7. A teleconference is ...

- a) exchange of letters in global networks;
- b) hyperlinked information system;
- c) information exchange system between computer network subscribers;
- d) a service for receiving and transmitting files of any format.

8. A computer that provides its resources to other computers when working together is called:

- a) an adapter;
- b) a switch;
- c) workstation;
- d) server.

9. Highlight the three most important methods for protecting information from illegal distribution:

- a) encryption;
- b) setting special file attributes;
- c) automatic redundancy;
- d) authentication;

e) antivirus

10. A compressed image of the source code is commonly used ...

- a) as a key to encrypt text;
- b) as a public key in symmetric algorithms;
- c) as a result of encrypting text to send it over an insecure channel;
- d) to create a digital signature

11. What tag is used to create hypertext?

- a) ...;
- b)
...;
- c) <A>...;
- d) <TD>...</TD>

12. What attribute sets the background color of a document?

- a) bgcolor
- b) background;
- c) color;
- d) there is no correct answer

13. How to separate text with a horizontal bar?

- a) <HR>;
- b) $\langle BR \rangle$;
- c) < A>;
- d) < EM >

14. How do I italicize text in an HTML document?

- a) using the tag;
- b) using the <I> tag;
- c) using the <U> tag

15. The title definition must be contained within the tag:

- a)<Title>...</Title>;
- b) <Head>...</Head>;
- c) < Br >;
- d) < B > ... < /B >

16. Internet services do not include ...

- a) Electronic mail (e-mail);
- b) Data Transfer Service (FTP);
- c) HTML (Hyper Text Markup Language);
- d) World Wide Web.

17. The program code in HTML is ...

- a) a plain text file created with a text editor;
- b) a program written in a special programming language;

c) a program written in Internet Explorer.

18. What does the BORDER attribute define on a TABLE markup element?

- a) cell spacing;
- b) cell width;
- c) border width.

19. Tag is:

- a) an instruction to the browser indicating how the text should be displayed;
- b) text that uses special characters;
- c) a pointer to another file or object;
- d) an escape sequence for writing Web documents in hypertext markup language.

20. To insert an image into an HTML document, use the command:

- a) ;
- b) ;
- c)

21. What will be displayed onWeb page when writing the following text on the page: <BODY BGCOLOR="BLACK" TEXT="YELLOW"> AAA BBB </BODY>?

- a) black background, "AAA, BBB" yellow text;
- b) black background, "AAA, BBB" red text;
- c) black background, "AAA" yellow, "BBB" red.

22. HTML is...

- a) hypertext transfer protocol;
- b) hypertext markup language;
- c) a group of messages on a specific topic.

23. The Internet Explorer app allows...

- a) download newsgroups using the NNTP protocol;
- b) download Web pages via HTTP protocol and files via FTP protocol;
- c) chat using the IRC protocol;
- d) transfer files via FTP

24. One of the search engines on the Internet is ...

- a) Gov.ru
- b) Lycos;
- c) THE BAT;
- d) File Search.

25. An electronic digital signature of a document allows the recipient ...

- a) only make sure that the document has not been modified at the time of transmission:
- b) only verify the validity of the document, but do not verify the authenticity of the document;
- c) either verify that the sender of the document is correct, or verify that the document has not been altered during transmission;
- d) establish the absence of distortion of information in the electronic document and verify that the signature belongs to the owner

26. The form of writing an IP address is a record of the form: xxx.xxx, where xxx is ...

- a) decimal numbers from 0 to 256;
- b) decimal numbers from 0 to 255;
- c) binary code;
- d) letters of the Latin alphabet.

27.HTTP is...

- a) hypertext transfer protocol;
- b) hypertext markup language;
- c) a group of messages on a specific topic.

28. To create a numbered list, use the tag:

- a) ;
- b) ;
- c) < DL >.

29. Specify the correct path to the file:

- a) ;
- b) ;
- c) .

30.TR tag defines:

- a) table row;
- b) table column:
- c) table border.

31. Hyperlinks on a Web page can provide a transition ...

- a) only within a given Web page;
- b) only on Web pages of this server;
- c) to any Web page of the given region;
- d) to any Web page of any Internet server.

32. The correct order of the tags is:

$$a) < tag1 > < tag2 > < tag3 > \dots < / tag1 > < / tag2 > < / tag3 > ;$$

- b) <tag1>...</tag1><tag1>...</tag1>;
- c) <tag1><tag2><tag3> ... </tag3></tag2></tag1>;
- d) <tag1>...</tag2><tag3>...</tag3><tag2>...</tag1>.

33.What will be displayed on the Web page when writing the following text on the page: <TABLE WIDTH=50%> <TR> <TD> AAA </TD> </TR> </TR> <TD> BBB </TD></TR> </TABLE>?

- a) table with 1 row and 1 column;
- b) a table with 1 row and 2 columns;
- c) a table with 2 rows and 1 column.

34. A hyperlink is given by a tag:

- a)< a src=" file.html"> text ;
- b) $\langle a="\underline{http://www.da.ru}"\rangle text \langle a\rangle;$
- c) text .

35. What does the <ALT> attribute of the tag mean?

- a) frame width;
- b) the source of the picture;
- c) the height of the picture.

36.ALIGN attribute is used for:

- a) alignment of objects on the screen;
- b) specifying the dimensions of the drawing;
- c) to set the border thickness of the picture.

Test Evaluation Criteria

Evaluation is carried out in an e-learning session on a 100-point scale.

The test includes 100 tasks, the maximum score for the test is 100.

Within the framework of the current level of assimilation of knowledge in the discipline, the test result is allowed, not lower than 61 points.