



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 the EP

(Signed)

December 6, 2022



Y.S. Khotimchenko
(Name)

CLAIM

Director of the Department of Pharmacy and Pharmacology

(Signed)

December 6, 2022

E.V. Khozhaenko

(Surname)

WORK PROGRAM OF THE DISCIPLINE

Current issues of epidemiology

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 2

Lectures 8 hours

Practical training 36 hours

A total of 44 hours of classroom work.

Self-study 100 hours.

including 63 hours for exam preparation.

Exam Semester 2

The work program is drawn up in accordance with the requirements of the Federal State Educational Standard for the field of training 32.04.01 Public Health, approved by the order of the Ministry of Education and Science of the Russian Federation dated 31.05.2017 No. 485.

The work programme was discussed at the meeting of the Department of Pharmacy and Pharmacology, Minutes No. 4 dated December 6, 2022.

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

Compiled by: Ph.D., Associate Professor V.G. Moreva

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1. The work program was revised at a meeting of the Department/Department/Division (implementing the discipline) and approved at a meeting of the Department/Department/Division (Graduating Structural Unit), minutes dated " ____ " _____ 2022. № _____
2. The work program was revised at the meeting of the Department/Department/Division (implementing the discipline) and approved at the meeting of the Department/Department/Division (Graduating Structural Unit), Minutes dated " ____ " _____ 2022. № _____
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1. Goals and objectives of mastering the discipline:

Purpose:

The study of the discipline "Current issues of epidemiology" is the improvement of knowledge and practical skills to identify the causes of the occurrence and spread of pathological conditions among the population and to substantiate, using the principles of evidence-based medicine, decisions on the implementation of preventive and anti-epidemic measures necessary for the implementation of professional activities in health care institutions.

Tasks:

- on the main theoretical provisions of epidemiology, their application taking into account the modern features of diseases of the population;
- to identify risk factors and establish cause-and-effect relationships in the system of public health – habitat;
- on the use of information technologies in practical activities, including evidence-based medicine data;
- training in the ability to make decisions in risk situations;
- development of the ability to independently evaluate the results of their activities;
- on the organization of preventive and anti-epidemic measures based on the results of epidemiological diagnostics.

As a result of studying this discipline, students form the following universal, general professional and professional competencies (elements of competencies).

Professional competencies of graduates and indicators of their achievement:

Task type	Code and name of professional competence (result of mastering)	Code and name of the competency indicator
	PC-1 Ability to calculate, assess and analyze indicators characterizing the activities of a medical organization and indicators characterizing the state of health of the population	PC-1.1 Knows the principles of information collection and processing PC-1.2 Able to create a data matrix, encode material PC-1.3 Proficient in statistical methods of data processing, including the use of information and analytical systems and the information and telecommunication network "Internet"

Task type	Code and name of professional competence (result of mastering)	Code and name of the competency indicator
	PC-4 Ability to analyze and evaluate the performance of a medical organization, manage the resources of a medical organization, develop and implement a quality management system in a medical organization, prepare a justification for the volume of medical care in accordance with the resources of the medical organization and the needs of the population	PC-4.1 Knows the methodology for a comprehensive assessment of the results of a medical organization's activities PC-4.2 Is able to develop and select the optimal areas of activity of a medical organization PP-4.3 Possesses skills of a systematic approach in the development of development plans

Code and Competency Statement	Stages of competence formation
PC-1.1 Knows the principles of information collection and processing	Knows the principles of collecting, processing, analyzing, and providing information Able to collect, process, analyze and provide information in his/her professional activities Possesses the skill of collecting, processing, analyzing and providing information in their professional activities
PC-1.2 Able to create a data matrix, encode material	Knows how to encode information Able to create a data matrix, encode the material Proficient in coding material
PC-1.3 Proficient in statistical methods of data processing, including the use of information and analytical systems and the information and telecommunication network "Internet"	Knows the basic methods of data processing, including the use of information and analytical systems and the information and telecommunication network "Internet" Able to process data and present it Proficient in statistical methods of data processing, including the use of information and analytical systems and the information and telecommunication network "Internet"
PC-4.1 Knows the methodology for a comprehensive assessment of the results of a medical organization's activities	Knows the methodology for a comprehensive assessment of the results of the activities of a medical organization Able to conduct a comprehensive assessment of the results of the activities of a medical organization Possesses the skill of conducting a comprehensive assessment of the results of the activities of a medical organization
PC-4.2 Is able to develop and select the optimal areas of activity of a medical organization	Knows the optimal areas of activity of a medical organization Able to develop and select the optimal areas of activity of a medical organization Possesses the skill of developing the optimal direction of the medical organization's activities

PP-4.3 Possesses skills of a systematic approach in the development of development plans	Knows a systematic approach to the development of plans for the development of a medical organization Knows how to develop Possesses the skills of a systematic approach to the development of development plans
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For the formation of the above competencies within the framework of the discipline "Current issues of epidemiology", the following methods of active/interactive learning are used: lectures - conferences, problem lectures, lectures-visualizations; practical classes - dispute, round table (preparation and discussion of abstracts).

II. Labor intensity of the discipline and types of training in the discipline

The labor intensity of the discipline is 4 credits (144 academic hours).

Designation	Types of Study Sessions and Student Work
Lek	Lecture
Lek electr.	
Ave	Practical exercises
Pr electr.	
WED:	Student's independent work during the period of theoretical training
Including control	Independent work of the student and contact work of the student with the teacher during the period of intermediate certification
	And other types of work

III. Structure of the discipline:

Form of study – full-time

№	Section Name Discipline	Se me ster	Number of hours by type of training and work of the student						Forms of intermediate attestation
			Lek	Lab	Av e	OK	WE D	Cont rol	
1	Section I. General Epidemiology		3						
2	Section II: Particular Epidemiology		3						
3	Section III: Epidemiology of Noncommunicable Diseases		2						

4	Class 1. Epidemiological Approach to the Study of Human Diseases. Subject and object of research				4				
	Class 2. Organization and conduct of an epidemiological study				4				
	Class 3. The Doctrine of the Epidemic Process. Fundamentals of Population (Epidemiological) Diagnostics				4				
	Class 4. Preventive and anti-epidemic measures and the basics of organizing anti-epidemic work. Epidemiological surveillance of communicable diseases				4				
5	Class 5. Anti-epidemic measures in case of emergencies. Assessment of the quality and effectiveness of preventive and anti-epidemic measures				4				
6	Class 6. Epidemiology and Prevention of Nosocomial Infections: Features of Epidemiology and Prevention of HSI in Hospitals of Various Profiles				4				
7	Class 7. Epidemiology and prevention of anthroponosis with fecal-oral and aerosol transmission				4				
8	Class 8. Epidemiology and prevention of zoonotic and sapronotic infections. Epidemiology and prevention of the most important helminthiasis				4				
9	Class 9. Epidemiology and prevention of noncommunicable diseases				4				
	Total:	2	8	-	36	-	37	63	Exam

**IV. CONTENT OF THE THEORETICAL PART OF THE COURSE
(8 hours, including the use of MAO – 4 hours.)**

Section I. General Epidemiology (3 hours)

- General epidemiology. Subject and Methods of Epidemiology.

- The Doctrine of the Epidemic Process.
- Basic principles of prevention and measures to combat infectious diseases.
- Epidemiological surveillance system and its information support.
- Methods of epidemiological research.
- Retrospective epidemiological analysis (CEA).
- Operational (current) epidemiological analysis (TEA).
- Epidemiological diagnostics (ED).
- Anti-epidemic measures in case of emergencies. Assessment of the quality and effectiveness of preventive and anti-epidemic measures.

Section II: Private Epidemiology (3 hours)

- Respiratory tract infections (anthroponosis, sapronoses).
- Intestinal infections.
 - Anthroponosis. Typhoid fever and paratyphoid A and B, cholera, viral hepatitis A and E, shigellosis, dysentery, poliomyelitis.
 - Zoonoses. Salmonellosis, botulism and other foodborne clostridiosis, brucellosis, leptospirosis, listeriosis. Blood infections.
 - Viral hepatitis B, C, D. Malaria.
 - Infections of the outer integument. Rabies, tetanus.
 - Natural focal infections. Tick-borne borreliosis, tularemia, Crimean hemorrhagic fever, Q fever.
 - Sexually transmitted infections. HIV infection (AIDS), urogenital chlamydia and ureaplasmosis, herpes infection.
 - Nosocomial infections. Features of the epidemiology of HAIs, preventive measures.

Section III: Epidemiology of Noncommunicable Diseases (2 hours)

Theoretical foundations of the epidemiology of non-communicable diseases:

- causes of integration of non-communicable and communicable diseases;
- similarities and differences in the subject of study, causes, conditions and manifestations of morbidity, mechanism of development and susceptibility.

Epidemiological studies on oncological, cardiovascular, pulmonary and other diseases based on the materials of publications of Russian and foreign researchers.

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

Practical exercises (36 hours, including 10 hours with the use of MAO)

Class 1. Epidemiological Approach to the Study of Human Diseases. Subject and Object of Research (4 hours)

1. Problem statement.
2. Definition of the goal.

3. The technology of performing the task, solving situational problems and interpreting the results obtained.

Class 2. Organization and conduct of an epidemiological study (4 hours)

1. Problem statement.

2. Definition of the goal.

3. The technology of performing the task, solving situational problems and interpreting the results obtained.

Class 3. The Doctrine of the Epidemic Process. Fundamentals of Population (Epidemiological) Diagnostics (4 hours)

1. Problem statement.

2. Definition of the goal.

3. The technology of performing the task, solving situational problems and interpreting the results obtained.

Class 4. Preventive and anti-epidemic measures and the basics of organizing anti-epidemic work. Epidemiological surveillance of communicable diseases (4 hours)

1. Problem statement.

2. Definition of the goal.

3. The technology of performing the task, solving situational problems and interpreting the results obtained.

Class 5. Anti-epidemic measures in case of emergencies. Assessment of the quality and effectiveness of preventive and anti-epidemic measures (4 hours)

1. Problem statement.

2. Definition of the goal.

3. The technology of performing the task, solving situational problems and interpreting the results obtained.

Class 6. Epidemiology and Prevention of Nosocomial Infections: Features of Epidemiology and Prevention of HSI in Hospitals of Various Profiles (4 hours)

1. Problem statement.

2. Definition of the goal.

3. Technology of task execution, solution of situational problems and interpretation of the results obtained.

Class 7. Epidemiology and Prevention of Anthroponosis with Fecal-Oral and Aerosol Transmission (4 hours)

1. Problem statement.

2. Definition of the goal.

3. Technology of task execution, solution of situational problems and interpretation of the results obtained.

Class 8. Epidemiology and prevention of zoonotic and sapronotic infections.
Epidemiology and Prevention of Critical Helminthiases (4 hours)

1. Problem statement.
2. Definition of the goal.
3. Technology of task execution, solution of situational problems and interpretation of the results obtained.

Class 9. Epidemiology and Prevention of Noncommunicable Diseases (4 hours)

1. Problem statement.
2. Definition of the goal.
3. Technology of task execution, solution of situational problems and interpretation of the results obtained.

Schedule of independent work in the discipline

№ p/n	Due Date/Deadlines	Type of independent work	Approximate time limits for execution	Form of control
1	Week 1-6	Preparation of abstracts	17	Protection
2	Week 7-12	Preparing a presentation	20	Protection
3	Week 13-18	Exam Preparation	63	Exam
		TOTAL	100 hrs.	

Recommendations for Student Self-Study

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

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

- preparatory (definition of goals, drawing up a program, preparation of methodological support);
- the main one (implementation of the program, the use of techniques for searching for information, assimilation, processing, application, transfer of knowledge, recording the results, self-organization of the work process);
- final (assessment of the significance and analysis of the results, their systematization, assessment of the effectiveness of the program and methods of work, conclusions on the directions of labor optimization).

In the process of independent work, the student acquires the skills of self-organization, self-control, self-management, 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 the future specialist, it is planned by the student independently. Each student independently determines the mode of his work and the measure of work spent 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.

Students' independent work consists of preparing for practical classes, working on recommended literature, writing reports on the topic of the seminar, preparing presentations and essays.

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

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

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

Recommendations for Student Self-Study

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

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

- preparatory (definition of goals, drawing up a program, preparation of methodological support);
- the main one (implementation of the program, the use of techniques for searching for information, assimilation, processing, application, transfer of knowledge, recording the results, self-organization of the work process);
- final (assessment of the significance and analysis of the results, their systematization, assessment of the effectiveness of the program and methods of work, conclusions on the directions of labor optimization).

In the process of independent work, the student acquires the skills of self-organization, self-control, self-management, 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 the future specialist, it is planned by the student independently. Each student independently determines the mode of his work and the measure of work spent 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.

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 a discussion constitute the content of the master's independent work. Lecture notes, professional literature, educational and methodological support of the discipline can become material for preparation. Forms of current control: survey, group discussion, control tasks, presentation of the report.

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

Assessment of knowledge and skills is carried out at an intermediate control point after passing the relevant section of the discipline. For the methodological support of the development of the discipline, the department develops teaching aids (recommendations and instructions for students and teachers, etc.), where the goals and methods of conducting classes are described in detail.

Independent work of students includes the study of teaching aids, materials, work on the Internet, which makes it possible to form appropriate skills and is the foundation for making rational management decisions in the economic field of healthcare. The active use of computer-based training and control technologies in the educational process contributes to the formation of students' skills to use modern innovative educational programs.

One of the necessary components of successful completion of the course is writing an essay

Recommendations for Abstracting Educational and Scientific Literature

Abstracting of educational and scientific literature involves an in-depth study of individual scientific works, which should ensure the development of the necessary skills for working on the book. All this will contribute to the expansion of scientific horizons, the improvement of their theoretical training, and the formation of scientific competence.

Textbooks, individual monographic studies and articles on issues provided for by the program of the academic discipline are offered for abstracting. When selecting literature on the chosen issue, it is necessary to cover the most important

areas of development of this science at the present stage. Particular attention should be paid to those literary sources that (directly or indirectly) can help the specialist in his practical activities. However, this section also includes works and individual studies on issues that go beyond the discipline being studied. It is recommended to use this literature if you want to expand your knowledge in any branch of science.

Along with the literature on general issues for masters, literature is assumed, taking into account the profile of their professional activity, obtained independently. Not all the proposed literature is equal in content and volume, so different approaches to its study are possible. In one case, it can be a general abstract of several literary sources of different authors devoted to the consideration of the same issue, in the other case, it can be a detailed study and abstract of one of the recommended works or even its individual sections, depending on the degree of complexity of the issue (problematic). In order to decide what to do in each case, you should consult with the teacher.

The choice of a specific work for the abstract should be preceded by a detailed acquaintance with the list of all literature given in the curriculum of the discipline. It is recommended to first familiarize yourself with the selected work by looking at the subheadings, highlighted texts, diagrams, tables, and general conclusions. Then it is necessary to read it carefully and thoughtfully (delving into the ideas and methods of the author), making notes on a separate sheet of paper about the main provisions and key issues. After reading, you should think over the content of the article or a separate chapter, paragraph (if we are talking about a monograph) and briefly write it down. Only strict definitions and formulations of laws should be written out verbatim. Sometimes it's helpful to include one or two examples to illustrate. In the event that there are unclear passages, it is recommended to read the following exposition, as it can help to understand the previous material, and then return to the comprehension of the previous exposition.

The result of the work on literary sources is an abstract.

When preparing an abstract, it is necessary to highlight the most important theoretical provisions and substantiate them independently, paying attention not only to the result, but also to the methodology used in the study of the problem. Reading scientific literature should be critical. Therefore, it is necessary to strive not only to assimilate the main content, but also the method of proof, to reveal the features of different points of view on the same issue, to assess the practical and theoretical significance of the results of the reviewed work. A very desirable element of the abstract is the expression by the listener of his own attitude to the ideas and conclusions of the author, supported by certain arguments (personal experience, statements of other researchers, etc.).

As mentioned above, abstracts of monographs and journal articles of a research nature must contain a definition of the problem and specific objectives of the research, a description of the methods used by the author, as well as the conclusions that he came to as a result of the research. The proposed literature for abstracting is constantly updated.

Aims and objectives of the abstract

An abstract (from the Latin *refero* – I report, report) is a brief summary of a problem of a practical or theoretical nature with the formulation of certain conclusions on the topic under consideration. The problem chosen by the student is studied and analyzed on the basis of one or more sources. Unlike a term paper, which is a comprehensive study of a problem, an essay is aimed at analyzing one or more scientific papers.

The objectives of writing an abstract are:

- development of students' skills in finding topical problems of modern legislation;
- development of skills of concise presentation of material with highlighting only the most essential points necessary to reveal the essence of the problem;
- development of skills for analyzing the studied material and formulating their own conclusions on the chosen issue in writing, in a scientific, literate language.

The objectives of writing an abstract are:

- to teach the student to convey the opinions of the authors, on the basis of whose works the student writes his essay, as correctly as possible;
- teach the student to competently state his/her position on the problem analyzed in the essay;
- prepare the student for further participation in scientific and practical conferences, seminars and competitions;
- help the student to determine the topic of interest to him, the further disclosure of which can be carried out when writing a term paper or a diploma;
- Understand for yourself and state the reasons for your agreement (disagreement) with the opinion of this or that author on this or that problem.

Basic requirements for the content of the abstract

Students should use only those materials (scientific articles, monographs, manuals) that are directly related to the topic they have chosen. Detached reasoning that is not related to the problem under analysis is not allowed. The content of the abstract should be specific, only one problem should be investigated (several are allowed, only if they are interrelated). The student must strictly adhere to the logic of the presentation (start with the definition and analysis of concepts, proceed to the

formulation of the problem, analyze the ways to solve it and draw appropriate conclusions). The abstract should end with conclusions on the topic.

In terms of its *structure*, the abstract consists of:

1. Title page;
2. Introduction, where the student formulates the problem to be analyzed and researched;
3. The main text, in which the selected topic is sequentially revealed. Unlike a term paper, the main text of the abstract involves dividing into 2-3 paragraphs without highlighting chapters. If necessary, the text of the abstract can be supplemented with illustrations, tables, graphs, but they should not "overload" the text;
4. Conclusions, where the student formulates conclusions drawn on the basis of the main text.
5. List of references. This list includes both those sources that the student refers to when preparing the essay, and others that were studied by him when preparing the essay.

The volume of the abstract is 10-15 pages of typewritten text, but in any case should not exceed 15 pages. Spacing – 1.5, font size – 14, margins: left – 3 cm, right – 1.5 cm, top and bottom – 1.5 cm. Pages should be numbered. The paragraph indentation from the beginning of the line is 1.25 cm.

The procedure for submitting an essay and its evaluation

Essays are written by students during the semester within the deadlines set by the teacher in a particular discipline, reported by the student and submitted for discussion. The printed version is handed over to the teacher who teaches the course.

Based on the results of the test, the student is given a certain number of points, which is included in the total number of points scored by the student during the semester. When evaluating the abstract, the correspondence of the content to the chosen topic, the clarity of the structure of the work, the ability to work with scientific literature, the ability to pose a problem and analyze it, the ability to think logically, knowledge of professional terminology, and literacy of design are taken into account.

Guidelines for Preparing Presentations

General requirements for the presentation:

- The presentation should not be less than 10 slides;
- The first page is the title page, on which the following must be presented: the name of the project; surname, first name, patronymic of the author;
- the next slide should be the table of contents, where the main stages (moments) of the presentation are presented; It is desirable that from the content via a hyperlink it is possible to go to the desired page and return to the content again;

- design and ergonomic requirements: color compatibility, limited number of objects on the slide, text color;
- The last slides of the presentation should be a glossary and a list of references.

Topics of abstracts and presentations

1. Evidence-Based Medicine as a System for Improving the Efficiency of Medical Care.
2. Organization of epidemiological data.
3. Assessment of the level of morbidity of the population.
4. Parasitic System as the Basis of the Epidemic Process. Driving Forces and Forms of Manifestation of the Epidemic Process.
5. Theory of Self-Regulation of Parasitic Systems. The Regulating Role of Social and Natural Conditions.
6. The Concept of the Epidemic Process as a Socio-Ecological System (B.L.Cherkassky).
7. Preventive and anti-epidemic measures, their potential and actual effectiveness.
8. E.N. Pavlovsky's Doctrine of Natural Focality. General provisions.
9. Components of the natural focus of transmissible zoonosis. Landscape epidemiology.
10. Principles of Prevention and Control of Infectious Diseases.
11. Retrospective epidemiological analysis. Purpose, objectives, methods.
12. Measures to localize the epidemic focus.
13. Hospital-acquired infections, modern concepts.
14. Possibility and prospects for the elimination of infectious diseases. Stages of elimination of individual nosoforms.
15. Quality control of immunobiological preparations. Prospects for the development of new vaccines and immunobiological preparations of a new generation.
16. Regime measures. Disinfection (focal, prophylactic) – measures to prevent the formation of an epidemic process.
17. Modern ideas about bacteriological safety of medical instruments and equipment.
18. Occupational infections of medical personnel. Relevance of the problem.
19. Anti-epidemic measures to localize the focus of AOI in health care facilities.

20. Organization of anti-epidemic measures in emergency situations. The Extraordinary Anti-Epidemic Commission: Composition, Tasks, Functions and Scope of Work.

21. Evidence-Based Medicine as a System for Improving the Efficiency of Medical Care.

22. Organization of epidemiological data.

23. Assessment of the level of morbidity of the population.

24. Parasitic System as the Basis of the Epidemic Process. Driving Forces and Forms of Manifestation of the Epidemic Process.

25. Theory of Self-Regulation of Parasitic Systems. The Regulating Role of Social and Natural Conditions.

26. The Concept of the Epidemic Process as a Socio-Ecological System (B.L.Cherkassky).

27. Preventive and anti-epidemic measures, their potential and actual effectiveness.

28. E.N. Pavlovsky's Doctrine of Natural Focality. General provisions.

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38. Occupational infections of medical personnel. Relevance of the problem.

39. Anti-epidemic measures to localize the focus of AOI in health care facilities.

40. Organization of anti-epidemic measures in emergency situations. The Extraordinary Anti-Epidemic Commission: Composition, Tasks, Functions and Scope of Work.

Criteria for Evaluating the Performance of Independent Work

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

- completeness and quality of completed tasks;
- • Mastery of methods and techniques of computer modeling in the issues under study, the use of software tools;
- the quality of the report, the use of rules and standards for the preparation of text and electronic documents;
- use of data from domestic and foreign literature, Internet sources, regulatory and legal information and best practices;
- No factual errors related to understanding the problem.

Criteria for Evaluating Students' Independent Work

- When assessing students' knowledge, not only the amount of knowledge is taken into account, but, first of all, the quality of material assimilation, understanding of the logic of the academic discipline, the ability to freely, competently, logically coherently present what has been studied, the ability to defend one's own point of view with arguments.
 - The answer to independent tasks, in which the material is presented systematically, logically and consistently, is graded as "excellent".
 - A "good" assessment presupposes knowledge of the material and the ability to draw independent conclusions, comment on the material presented; A response with minor flaws.
 - "Satisfactory" is the assessment of the assimilation of the material when the student has not studied some sections deeply enough, allows unclear formulations, gives incomplete answers.
 - "Unsatisfactory" is given in the case when the student does not know a significant part of the educational material, makes significant mistakes; Knowledge is haphazard.

Criteria for evaluating the abstract

- 100-86 points are given to the student if the student expressed his opinion on the formulated problem, argued it, accurately determining its content and components. The data of domestic and foreign literature, statistical data, information of a regulatory and legal nature are given. The student knows and possesses the skill of independent research work on the research topic; methods and techniques of analysis of theoretical and/or practical aspects of the field under study.

- 85-76 points - the work is characterized by semantic integrity, coherence and consistency of presentation; No more than 1 mistake was made in explaining the meaning or content of the problem. For argumentation, the data of domestic and foreign authors are given. Research skills and abilities have been demonstrated. There are no factual 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 involved. No more than 2 errors were made in the meaning or content of the problem.

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

V. EDUCATIONAL AND METHODOLOGICAL SUPPORT OF STUDENTS' INDEPENDENT WORK

Independent work is defined as individual or collective learning activities carried out without the direct supervision of the teacher, but according to his tasks and under his supervision. Independent work is a cognitive learning activity, when the sequence of the 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 students' independent work is to acquire the necessary competencies in their field of training, experience in creative and research activities.

Forms of independent work of students:

- work with basic and additional literature, Internet resources;
- independent acquaintance with the lecture material presented on electronic media in the library of the educational institution;
- preparation of abstract reviews of periodical sources, 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 classroom tests;
- doing home tests;
- performing test tasks, solving problems;
- compilation of crosswords, schemes;
- preparation of reports for presentation at a seminar or conference;
- filling out a workbook;
- writing essays, term papers;

- preparation for business and role-playing games;
- resume writing;
- preparation for tests and exams;
- other types of activities organized and carried out by the educational institution and student self-government bodies.

VI. MONITORING THE ACHIEVEMENT OF THE COURSE

OBJECTIVES

Item No.	Supervised modules/sections/topics of the discipline	Codes and Stages of Competency Formation		Valuation Tools - Name	
				Current control	Intermediate Attestation
1	Section 1 General Epidemiology	PP-1.1; PC-1.2; PC-1.3; PP-4.1; PP-4.2; PC-4.3	<p>Knows:</p> <ul style="list-style-type: none"> • subject areas of epidemiology; • the basics of organizing and conducting epidemiological studies (descriptive and evaluative, analytical, experimental), their purpose and features of organization, sources of errors in epidemiological studies and ways to eliminate them. Legal and Ethical Aspects of Epidemiological Research; <p>Can:</p> <ul style="list-style-type: none"> • organize epidemiological studies; • conduct a retrospective assessment of the intensity, dynamics, structure, territorial distribution of morbidity (mortality, disability) in order to identify priority areas of preventive and anti-epidemic activities of medicine, to form hypotheses about risk factors; <p>Owens:</p> <ul style="list-style-type: none"> • descriptive, evaluative and analytical methods of epidemiological diagnosis; • the ability to identify, based on the results of 	UO-1 interview, Abstract PR-4, tests PR-1	Exam Questions 1-20

			operational analysis, the prerequisites and harbingers of complications of the epidemic situation		
2	Section 2 Particular Epidemiology	PP-1.1; PC-1.2; PC-1.3; PP-4.1; PP-4.2; PC-4.3	<p>Knows:</p> <ul style="list-style-type: none"> • features of the epidemiology of the most important communicable, parasitic and non-communicable diseases and measures to combat them; • theoretical, methodological and organizational foundations of epidemiological surveillance of individual groups and nosological forms of infectious, parasitic and non-communicable diseases; <p>Can:</p> <ul style="list-style-type: none"> • collect, statistically and logically process information in order to assess the state of health and morbidity of the population and the factors that determine them; • conduct inspection of epidemic foci and epidemically significant objects; • carry out epidemiological surveillance and control of individual groups and nosological forms of infectious, parasitic and non-communicable diseases; • organize preventive and anti-epidemic measures and assess their quality and effectiveness; • carry out sanitary and epidemiological inspection of facilities for compliance with the requirements of sanitary legislation; <p>Owens:</p> <ul style="list-style-type: none"> • the ability to formulate and evaluate hypotheses 	UO-1 interview, Abstract PR-4, tests PR-1	Exam Questions 21-40

			<p>about the causal relationship between morbidity and risk factors;</p> <ul style="list-style-type: none"> the ability to organize preventive and anti-epidemic measures based on the results of epidemiological diagnostics 		
3	Section 3 Epidemiology of noncommunicable diseases	PP-1.1; PC-1.2; PC-1.3; PP-4.1; PP-4.2; PC-4.3	<p>Knows:</p> <ul style="list-style-type: none"> principles of organizing preventive and anti-epidemic measures based on evidence-based medicine; regulatory and legal framework for activities; <p>Can:</p> <ul style="list-style-type: none"> evaluate the formulated hypotheses based on the principles of evidence-based medicine; conduct a prompt assessment of the epidemiological situation and the epidemic situation; <p>Owns:</p> <ul style="list-style-type: none"> the ability to use databases to find evidence of the validity of decisions made 	UO-1 interview, Abstract PR-4, tests PR-1	Exam Questions 41-60

VII. LIST OF EDUCATIONAL LITERATURE AND INFORMATIONAL AND METHODOLOGICAL SUPPORT OF THE DISCIPLINE

Reference citations

1. Infectious diseases. Textbook / I.A. Berezhnova. — M. : RIOR : INFRA-M, 2017. — 319 p. — (VO). — Mode of access: <http://znanium.com/catalog/product/814376>

2. Infectious Diseases [Elektronnyi resurs]: uchebnik / Alikeeva G. K. et al.; Ed. by N. D. Yushchuk, Y. Y. Vengerov. - 2nd ed., revised and supplemented - Moscow: GEOTAR-Media, 2016. — 704 p. (in Russian). <http://www.studentlibrary.ru/book/ISBN9785970436219.html>

3. Hospital epidemiology. A Guide to Practical Classes [Elektronnyi resurs] / L. P. Zueva [i dr.] ; ed. by L. P. Zueva - Moscow: GEOTAR-Media, 2015. -416 p. (in Russian). <http://www.studentlibrary.ru/book/ISBN9785970435397.html>

4. Yushchuk N.D. et al. Epidemiology of infectious diseases / Yushchuk N.D. et al. - Moscow: GEOTAR-Media, 2014. 496 p. (in Russian). <http://www.studmedlib.ru/book/ISBN9785970428245.html>

5. Novikova V.P. Epidemiology [Elektronnyi resurs]: protokoly k prakticheskim zayatel'nyim dlya studentov 5 kursa, obucheniushchikh po spetsial'nosti 060101 Medicnoe delo [Epidemiology]: protocols for practical classes for students of the 5th course, studying in the specialty General Medicine. — Electron. Text data. - Cherkessk: Severo-Kavkazskaya gosudarstvennoi gumanitarno-tehnologicheskaya akademiya, 2014. — 32 p. — 2227-8397. — Mode of access: <http://www.iprbookshop.ru/27250.html>

6. Pokrovskiy V.I., Pak S.G., Briko N.I. Infectious diseases and epidemiology: textbook. - 3rd ed., ispr. and add. - Moscow: GEOTAR-Media, 2013. – 1008 p. - <http://www.studmedlib.ru/book/ISBN9785970416525.html>

Further reading

1. Brazhnikov A.Yu., Briko N.I., Kiryanova E.V., et al. Obshchaya epidemiologiya s osnovami doprovostvennoy meditsina [General epidemiology with the basics of evidence-based medicine]. A Guide to Practical Classes: A Textbook / Ed. by V.I. Pokrovsky. - 2nd ed., ispr. Moscow: GEOTAR-Media, 2012. 496 p. (in Russian). <http://www.studmedlib.ru/book/ISBN9785970417782.html>

2. Brazhnikov A.Y., Briko N.I., Kiryanova E.V. General Epidemiology with the Basics of Evidence-Based Medicine. Manual / Ed. by V.I. Pokrovsky, N.I. Briko. Moscow: GEOTAR-Media, 2010. 400 p. (in Russian). <http://www.studmedlib.ru/book/ISBN9785970413654.html>

Regulatory Materials

1. Constitution of the Russian Federation.
2. Civil Code of the Russian Federation.
3. Ugolovnyy kodeks Rossiiskoi Federatsii [Criminal Code of the Russian Federation].
4. Federal Law No. 323-FZ of November 21, 2011 "On the Fundamentals of Health Protection of Citizens of the Russian Federation".
5. Federal Law No. 52-FZ of March 30, 1999 "On Sanitary and Epidemiological Well-Being of the Population" (as amended) <http://files.stroyinf.ru/data1/6/6000/>
6. Federal'nyy zakon ot 17.09.1998 No. 157-FZ "Ob immunoprofilaktika infektivnykh boleznykh" [Federal Law of 17.09.1998 No. 157-FZ "On Immunoprophylaxis of Infectious Diseases"].

7. Federal'nyy zakon Rossiiskoi Federatsii ot 27.07.2006 g. No. 152-FZ "O lichnogo dannykh dannykh" [Federal Law of the Russian Federation dated 27.07.2006 No. 152-FZ "On Personal Data"].

8. Decree of the Government of the Russian Federation dated July 24, 2000 No. 554 "On Approval of the Regulations on the State Sanitary and Epidemiological Service of the Russian Federation and the Regulations on State Sanitary and Epidemiological Regulation".

9. Order of the Ministry of Health and Social Development of the Russian Federation dated 31.01.2011 No. 51n "On Approval of the National Calendar of Preventive Vaccinations and the Calendar of Preventive Vaccinations for Epidemic Indications".

10. Sanitary Rules SP 3.3.2367-08 "Organization of Immunoprophylaxis of Infectious Diseases".

11. Sanitary rules SP 3.3.2342-08 "Ensuring the safety of immunization".

12. Sanitary rules SP 3.3.2.1248-03 "Conditions of transportation and storage of medical immunobiological preparations".

13. Sanitary Rules SP 3.3.2.2329-08 "Amendment and Supplement No. 1 to Sanitary Rules 3.3.2.1248-03 "Conditions of Transportation and Storage of Immunobiological Preparations".

14. Decree of the Government of the Russian Federation dated July 15, 1999 No. 825 "On Approval of the List of Works, the Performance of Which Is Associated with a High Risk of Infectious Diseases and Requires Mandatory Preventive Vaccinations".

15. Sanitary Rules and Norms SanPiN 2.1.3.2630-10 "Sanitary and Epidemiological Requirements for Organizations Engaged in Medical Activities".

16. Sanitary Rules and Norms SanPiN 2.1.7.2790-10 "Sanitary and Epidemiological Requirements for Medical Waste Management".

17. Sanitary Rules SP 1.1.1058-01 "Organization and Conduct of Production Control over Compliance with Sanitary Rules and Implementation of Sanitary and Anti-Epidemic (Preventive) Measures"

18. Sanitary Rules SP 3.5.1378-03 "Sanitary and Epidemiological Requirements for the Organization and Implementation of Disinfection Activities".

19. Sanitary Rules SP 3.5.3.1129-02 "Deratization".

20. Sanitary rules and norms SanPiN 3.5.2.1376-03 "Disinsection".

**List of resources of the information and telecommunication network
"Internet" necessary for mastering the discipline**

1. Patent Database and Patent Search <http://www.freepatent.ru/>

2. Health Online Portal <http://bio-x.ru/go.mail.ru/search?rf=e.mail.ru&fm=1&us=15&usln=3&ustr=healthcare&usqid=7d41348ea69338f3&hasnavig=1&sbmt=1509229987234&q=healthcare>
3. Website scientific research <https://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. <http://med-lib.ru/speclit/patfiz/index.php>
8. <http://www.medliter.ru/?page=list&id=09>
9. <http://www.rmj.ru/medjurnrus.htm>
10. Legal reference system Consultant Plus.
11. <http://vladmedicina.ru> Medical portal of Primorsky Krai
12. <http://www.rosminzdrav.ru> Official website of the Ministry of Health of the Russian Federation
13. <http://meduniver.com> Medical website about various fields of medicine
14. 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 high data compression ratio;
- ABBYY FineReader 11 is a software for optical character recognition;
- Adobe Acrobat XI Pro is a software package for creating and viewing electronic publications in PDF format;
- ESET Endpoint Security is a comprehensive protection for Windows-based workstations. Virtualization support + new technologies;
- WinDjView 2.0.2 is a program for recognizing and viewing files with the DJV and DjVu formats of the same name.

VIII. METHODOICAL INSTRUCTIONS FOR MASTERING THE DISCIPLINE

The theoretical part of the discipline "Current issues of epidemiology" is revealed in lectures, since the lecture is the main form of education, where the teacher gives the basic concepts of the discipline.

The sequence of presentation of the material in lectures is aimed at forming an indicative basis for students' subsequent assimilation of the material in independent work.

Practical exercises of the course are conducted in all sections of the curriculum. Practical work is aimed at developing students' skills of independent research work. In the course of practical classes, the master performs a set of tasks that allow him 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, there is the development of skills of independent research in the process of working with scientific literature, periodicals, the formation of the ability to defend one's point of view with arguments, listen to others, answer questions, and conduct discussions.

Lectures are focused on covering the main topics in each section of the course and are designed to orient students in the proposed material, lay the scientific and methodological foundations for further independent work of students.

Independent work on the course *is especially important for the professional training* of students. In the course of this work, students select the necessary material on the issue under study and analyze it. Independent work with literature includes such techniques as drawing up a plan, theses, notes, annotating sources, writing tests.

Students should be introduced to the main sources, without which it is impossible to fully understand the problems of the course. Therefore, these sources are recommended for students for home study and are included in the program.

The course should contribute to the development of skills for informed and independent evaluations of facts and scientific concepts. Therefore, in all forms of knowledge control, especially when passing a test, attention should be paid to the understanding of the main problem field, to the ability to critically use its results and conclusions.

In the process of teaching the discipline, the following methods of active/interactive learning are used:

Lectures:

1. Problematic lecture.

The lecture begins with the teacher's statement of the problems, which are solved in the course of the presentation of the material. Answering a problem requires reflection from the entire audience. During the lecture, the students' thinking takes place with the help of the teacher's creation of a problem situation before they receive all the necessary information that constitutes new knowledge for them. In this way, students try to find a solution to a problem situation on their own.

Educational problems are accessible in their complexity for students, they take into account the cognitive capabilities of the students, proceed from the subject being

studied and are significant for the assimilation of new material and the development of personality - general and professional.

A problem-based lecture ensures the creative assimilation of the principles and patterns of the studied science by future specialists, activates the educational and cognitive activity of students, their independent classroom and extracurricular work, the assimilation of knowledge and its application in practical classes.

Practical classes are focused on the most fundamental and problematic issues and are designed to stimulate the development of one's own position on these topics.

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

Conference or Round Table

When using this method, it is possible to invite various specialists who are engaged in the study of the problem under consideration or work on the 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 the one that is more interesting for them. The selected questions are passed on to the invited specialist of the "round table" to prepare for the presentation and answers. At the same time, several specialists engaged in the study of this problem may be invited to the round table. In order for the round table to be active and engaged, it is necessary to encourage the audience to exchange views and maintain an atmosphere of free discussion.

With the use of all these forms of classes, students get real practice of formulating their point of view, comprehending the system of argumentation, i.e. 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 master oral speech, to listen, hear and understand others, and to conduct an argument correctly and reasonably. Teamwork requires not only individual responsibility and independence, but also self-organization of the team's work, demandingness, 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 peculiarities 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 an action from one participant to another; Self-management skills are developed.

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

In the previous lesson, the teacher instructs 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 trainee must determine whether there is a problem in it, what it is, and determine his attitude to the situation. At the same time, each student should analyze the causes, course and results of the activities carried out by getting used to the role of specific historical figures. The practical lesson begins with an introductory speech by the teacher, in which the problems for discussion are voiced. In the course of the discussion, each of the students has the opportunity to get acquainted with the options for the solution, listen to and weigh the many of their assessments, additions, changes, enter into a dialogue and discussion.

In the course of discussing the issues of the practical lesson, the analytical skills of the trainers 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 based on the students' performances, makes 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. There are three more people - expert analysts.

The practical lesson is implemented in four stages:

The first is preparatory (carried out 1-2 weeks before the practical lesson). The teacher instructs about the purpose, content, nature, and rules of participation in the game. Student training 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 received proposals and ideas, which will allow you to purposefully and meaningfully analyze and summarize the results of the lesson.

Mutual criticism and evaluations are strictly forbidden, as they prevent the emergence of new ideas. It is necessary to refrain from actions and gestures that may be misinterpreted by other participants in the session. No matter how fantastic or improbable an idea put forward by any of the participants in the session, it should

be met with approval. The more proposals are put forward, the more likely it is that a new and valuable idea will emerge.

Secondly, 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 thinking activities to search for non-traditional ways to solve problems, when discussing controversial issues, hypotheses, problem or conflict situations.

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

For current control and intermediate certification, an interview and a survey are conducted. To prepare for the exam, a list of questions is provided, which is presented in Appendix 2.

IX. MATERIAL AND TECHNICAL SUPPORT OF DISCIPLINE

The educational process in the discipline is carried out in FEFU lectures, computer classes, equipped with computers and multimedia systems, with connection to the FEFU corporate network and the Internet.

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.

In order to provide special conditions for the education of people with disabilities and persons with disabilities at FEFU, all buildings are equipped with ramps, elevators, lifts, specialized places equipped with toilets, information and navigation support signs.

Name of Equipped Premises and Self-Study Rooms	List of Main Equipment
690922, Primorsky Krai, Vladivostok, Russky Island, Saperny Peninsula, Ajax village, 10, School of Biomedicine, room M 422, area 158.6 m ²	Multimedia audience: Electric Screen 236*147cm Trim Screen Line; DLP projector, 3000 ANSI Lm, WXGA 1280x800, 2000:1 EW330U Mitsubishi; CP355AF Avervision visualizer, MP-HD718 Multipix camcorder; CORSA-2007 Tuarex Specialized Equipment Fastening Subsystem; Video Switching Subsystem: Audio Switching and

	Sound Reinforcement Subsystem: Power Amplifier, Wireless LAN Based on 802.11a/b/g/n 2x2 MIMO(2SS) Access Points.
690922, Primorsky Krai, Vladivostok, Russky Island, Saperny Peninsula, Ajax Village, 10, School of Biomedicine, aud. M 419, area 74.9 m ²	Multimedia audience: Electric Screen 236*147cm Trim Screen Line; DLP projector, 3000 ANSI Lm, WXGA 1280x800, 2000:1 EW330U Mitsubishi; CP355AF Avervision visualizer, MP-HD718 Multipix camcorder; CORSA-2007 Tuarex Specialized Equipment Fastening Subsystem; Video Switching Subsystem: Audio Switching and Sound Reinforcement Subsystem: Power Amplifier, Wireless LAN Based on 802.11a/b/g/n 2x2 MIMO(2SS) Access Points.
690922, Primorsky Krai, Vladivostok, Russky Island, Saperny Peninsula, Ajax Village, 10, Oud. M612, area 47.2 m ²	Computer class for 22 workplaces: HP RgoOpe 400 All-in-One 19.5 (1600x900), Core i3-4150T, 4GB DDR3-1600 (1x4GB), 1TB HDD 7200 SATA, DVD+/-RW, GigEth, Wi-Fi, VT, usb kbd/mse, Win7Pro (64-bit)+Win8.1Pro(64-bit), 1-1-1 Wty (25 pcs.)
Reading rooms of the FEFU Scientific Library with open access to the collection (building A - level 10)	HP RgoOpe 400 All-in-One 19.5 (1600x900), Core i3-4150T, 4GB DDR3-1600 (1x4GB), 1TB HDD 7200 SATA, DVD+/-RW, GigEth, Wi-Fi, VT, usb kbd/mse, Win7Pro (64-bit)+Win8.1Pro(64-bit), 1-1-1 Wty Internet access speed 500 Mbps. Workplaces for people with disabilities are equipped with displays and Braille printers; equipped with: portable devices for reading flat-printed texts, scanning and reading machines, a video magnifier with the ability to adjust color spectrums; magnifying electronic magnifiers and ultrasonic markers

X. VALUATION FUND

WOS Passport

Professional competencies of graduates and indicators of their achievement:

Task type	Code and name of professional competence (result of mastering)	Code and name of the competency indicator
	PC-1 Ability to calculate, assess and analyze indicators characterizing the activities of a medical organization and indicators characterizing the state of health of the population	PC-1.1 Knows the principles of information collection and processing PC-1.2 Able to create a data matrix, encode material PC-1.3 Proficient in statistical methods of data processing, including the use of information and analytical systems and the information and telecommunication network "Internet"

Task type	Code and name of professional competence (result of mastering)	Code and name of the competency indicator
	PC-4 Ability to analyze and evaluate the performance of a medical organization, manage the resources of a medical organization, develop and implement a quality management system in a medical organization, prepare a justification for the volume of medical care in accordance with the resources of the medical organization and the needs of the population	PC-4.1 Knows the methodology for a comprehensive assessment of the results of a medical organization's activities PC-4.2 Is able to develop and select the optimal areas of activity of a medical organization PP-4.3 Possesses skills of a systematic approach in the development of development plans

Code and Competency Statement	Stages of competence formation
PC-1.1 Knows the principles of information collection and processing	Knows the principles of collecting, processing, analyzing, and providing information Able to collect, process, analyze and provide information in his/her professional activities Possesses the skill of collecting, processing, analyzing and providing information in their professional activities
PC-1.2 Able to create a data matrix, encode material	Knows how to encode information Able to create a data matrix, encode the material Proficient in coding material
PC-1.3 Proficient in statistical methods of data processing, including the use of information and analytical systems and the information and telecommunication network "Internet"	Knows the basic methods of data processing, including the use of information and analytical systems and the information and telecommunication network "Internet" Able to process data and present it Proficient in statistical methods of data processing, including the use of information and analytical systems and the information and telecommunication network "Internet"
PC-4.1 Knows the methodology for a comprehensive assessment of the results of a medical organization's activities	Knows the methodology for a comprehensive assessment of the results of the activities of a medical organization Able to conduct a comprehensive assessment of the results of the activities of a medical organization Possesses the skill of conducting a comprehensive assessment of the results of the activities of a medical organization
PC-4.2 Is able to develop and select the optimal areas of activity of a medical organization	Knows the optimal areas of activity of a medical organization Able to develop and select the optimal areas of activity of a medical organization Possesses the skill of developing the optimal direction of the medical organization's activities

PP-4.3 Possesses skills of a systematic approach in the development of development plans	<p>Knows a systematic approach to the development of plans for the development of a medical organization</p> <p>Knows how to develop</p> <p>Possesses the skills of a systematic approach to the development of development plans</p>
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MONITORING THE ACHIEVEMENT OF THE COURSE OBJECTIVES

Item No.	Supervised modules/sections/topics of the discipline	Codes and Stages of Competency Formation		Valuation Tools - Name	
				Current control	Intermediate Attestation
1	Section 1 General Epidemiology	PP-1.1; PC-1.2; PC-1.3; PP-4.1; PP-4.2; PC-4.3	<p>Knows:</p> <ul style="list-style-type: none"> • subject areas of epidemiology; • the basics of organizing and conducting epidemiological studies (descriptive and evaluative, analytical, experimental), their purpose and features of organization, sources of errors in epidemiological studies and ways to eliminate them. Legal and Ethical Aspects of Epidemiological Research; <p>Can:</p> <ul style="list-style-type: none"> • organize epidemiological studies; • conduct a retrospective assessment of the intensity, dynamics, structure, territorial distribution of morbidity (mortality, disability) in order to identify priority areas of preventive and anti-epidemic activities of medicine, to form hypotheses about risk factors; <p>Owens:</p> <ul style="list-style-type: none"> • descriptive, evaluative and analytical methods of epidemiological diagnosis; • the ability to identify, based on the results of operational analysis, the prerequisites and harbingers 	UO-1 interview, Abstract PR-4, tests PR-1	Exam Questions 1-20

			of complications of the epidemic situation		
2	Section 2 Particular Epidemiology	PP-1.1; PC-1.2; PC-1.3; PP-4.1; PP-4.2; PC-4.3	<p>Knows:</p> <ul style="list-style-type: none"> • features of the epidemiology of the most important communicable, parasitic and non-communicable diseases and measures to combat them; • theoretical, methodological and organizational foundations of epidemiological surveillance of individual groups and nosological forms of infectious, parasitic and non-communicable diseases; <p>Can:</p> <ul style="list-style-type: none"> • collect, statistically and logically process information in order to assess the state of health and morbidity of the population and the factors that determine them; • conduct inspection of epidemic foci and epidemically significant objects; • carry out epidemiological surveillance and control of individual groups and nosological forms of infectious, parasitic and non-communicable diseases; • organize preventive and anti-epidemic measures and assess their quality and effectiveness; • carry out sanitary and epidemiological inspection of facilities for compliance with the requirements of sanitary legislation; <p>Owns:</p> <ul style="list-style-type: none"> • the ability to formulate and evaluate hypotheses about the causal 	UO-1 interview, Abstract PR-4, tests PR-1	Exam Questions 21-40

			relationship between morbidity and risk factors; <ul style="list-style-type: none"> the ability to organize preventive and anti-epidemic measures based on the results of epidemiological diagnostics 		
3	Section 3 Epidemiology of noncommunicable diseases	PP-1.1; PC-1.2; PC-1.3; PP-4.1; PP-4.2; PC-4.3	Knows: <ul style="list-style-type: none"> principles of organizing preventive and anti-epidemic measures based on evidence-based medicine; regulatory and legal framework for activities; Can: <ul style="list-style-type: none"> evaluate the formulated hypotheses based on the principles of evidence-based medicine; conduct a prompt assessment of the epidemiological situation and the epidemic situation; Owns: <ul style="list-style-type: none"> the ability to use databases to find evidence of the validity of decisions made 	UO-1 interview, Abstract PR-4, tests PR-1	Exam Questions 41-60

**Scale for assessing the level of competence formation
in the discipline "Current issues of epidemiology"**

Code and Competency Statement	Stages of competence formation		criteria	Indicators	Points
PC-1 Ability to calculate, evaluate, and analyze indicators characterizing the activities of a medical organization and indicators characterizing the state of	Knows	principles of organization of applied and practical projects and other activities for the study and modeling of social, economic, epidemiological and other conditions affecting the health and quality of life of the population	knows the modern organization of applied and practical projects and other activities for the study and modeling of	knowledge and use in practical work of the principles of organizing applied and practical projects to study social, economic and anti-epidemic conditions affecting the health of the population	65-71
	Can	implement applied and practical	apply applied and practical	Apply practical projects and other	71-84

health of the population		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	projects and other measures to study the conditions that affect the health and quality of life of the population	measures to study the conditions that affect the health and quality of life of the population	
	Owns	skills in 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	is able to organize practical projects to identify conditions that affect the health and quality of life of the population	possesses the principles of organizing applied and practical projects and other activities to study the conditions and risk factors that affect the health and quality of life of the population	85-100
PC-4 Ability to analyze and evaluate the performance of a medical organization, manage the resources of a medical organization, develop and implement a quality management system in a medical organization, prepare a justification for the volume of medical care in accordance with the resources of the medical organization and the needs of the population	Knows (Threshold)	Fundamentals of planning and organization of measures to ensure the protection of public health in accordance with the resources of the medical organization and the needs of the population	Knowledge of the basics of planning and organizing measures to ensure public health in accordance with the resources of the medical organization and the needs of the population	Ability to explain and apply in practice the basics of planning and organizing measures to ensure the protection of public health in accordance with the resources of the medical organization and the needs of the population	61-70
	Can (Advanced)	properly draw up official medical documents, maintain primary medical documentation, carry out measures to ensure health protection, analyze and evaluate the performance of a medical organization	analyze and evaluate the performance indicators of a medical organization, manage the resources of a medical organization, develop and implement quality management systems in a medical organization, justify the	ability to analyze and evaluate the performance of a medical organization, manage the resources of a medical organization, develop and evaluate the performance of a medical organization. implementation of a quality management system in a medical	71-84

			volume of medical care in accordance with the resources of the medical organization and the needs of the population	organization in accordance with the resources of the medical organization and the needs of the population	
	Proficient (High)	methods of planning and organizing measures to ensure the health of the population, developing and implementing a quality management system in a medical organization, preparing a justification for the volume of medical care in accordance with the resources of the medical organization and the needs of the population	Mastery of methods for planning and organizing measures to ensure public health, analysis and evaluation of performance indicators of a medical organization, management of resources of a medical organization , development and implementation of a quality management system in a medical organization	ability analysis and evaluation of the performance indicators of a medical organization, management of the resources of a medical organization, development and implementation of a quality management system in a medical organization, preparation of justification for the volume of medical care in accordance with the resources of the medical organization and the needs of the population	85-100

Methodological Recommendations Defining the Procedures for Assessing the Results of Mastering the Discipline

Current assessment of students. Current certification of students in the discipline "Current issues of epidemiology" is carried out in accordance with the local regulations of FEFU and is mandatory.

Current attestation in the discipline "Current issues of epidemiology" is carried out in the form of control measures (written survey, defense of practical/laboratory works) to assess the actual results of master's training is carried out by the leading teacher.

The objects of assessment are:

- academic discipline (activity in classes, timeliness of various types of tasks, attendance of 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 in the discipline "Current issues of epidemiology" is carried out in accordance with the local regulations of FEFU in the form of an exam.

. 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 attestation in the discipline "Current issues of epidemiology" is carried out in the form of a test in the form of a written answer.

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

Assessment Tools for Intermediate Attestation

Exam Questions

1. The subject and methods of epidemiology, its relation to other disciplines.
2. The role of epidemiology for medical science and public health. Understanding the epidemiology of noncommunicable diseases.
3. History of the development of epidemiology. The significance of the works of D.K. Zabolotny, N.F. Gamaleya, L.V. Gromashevsky, E.N. Pavlovsky, V.A. Bashenin, I.I. Mechnikov.
4. The Place of Epidemiology in the Structure of Medical Disciplines.
5. Definition and structure of the epidemiological method of research.
6. Descriptive and Evaluative Epidemiological Methods /Descriptive Epidemiology/.
7. Analytical Epidemiological Methods /Analytical Epidemiology/.
8. Experimental epidemiological methods.
9. Method of mathematical modeling. Quantitative epidemiology.
10. The Doctrine of the Epidemic Process. Definition of the concept, intensity of the epidemic process.
11. A brief description of the three links of the epidemic process and their interrelation.
12. Definition of "source of infection". Sources of infection in anthroponosis,

zoonoses, sapronoses.

13. Mechanism of transmission. Factors of transmission. Ways of spreading the contagious principle.

14. Principles of classification of infectious diseases. Evolutionary Foundations of L.V. Gromashevsky's Classification (Special Position of Zoonoses in Addition to Gromashevsky's Classification).

15. The role of social and natural factors in the development of the epidemic process. The Doctrine of Natural Focality of Infectious Diseases (E.N. Pavlovsky).

16. Epidemic process, its structure, forms of manifestation.

17. Sources of infection; Variants for various diseases. Conditions that determine their epidemiological significance.

18. Mechanism of transmission. Definitions, variants, the concept of ways and factors of transmission.

19. Receptivity of the population. Immunity and non-specific resistance.

20. The influence of the social and natural environment on the development of the epidemic process.

21. Orientation and organization of anti-epidemic work in the epidemic focus.

22. International System for the Prevention of the Importation of Infectious Diseases.

23. Organization of sanitary protection of the country's territory.

24. Organization of anti-epidemic measures in emergency situations.

25. Structure and organization of the work of the State Centers for Sanitary and Epidemiological Surveillance. Sanitary and epidemiological documentation.

26. Modern ideas about disinfection. Types of disinfection and its role in the system of anti-epidemic measures.

27. Chemical disinfectants. Characteristics and methods of their application.

28. Mechanical and physical means of disinfection. Their characteristics, methods of application.

29. Disinsection. Fixed assets and their application.

30. Deratization, Its Methods and Means.

31. Susceptibility to infectious diseases. Types of immunity and its influence on the development of the epidemic process.

32. Basic provisions and requirements for the organization and conduct of preventive vaccinations.

33. Characteristics of biological preparations belonging to the group of vaccines, toxoids.

34. Characteristics of drugs belonging to the group of serums, immunoglobulins, bacteriophages.

35. The role and importance of immunoprophylaxis. Contribution of domestic scientists to the development of vaccine prophylaxis.
36. Current state and prospects of vaccination prophylaxis.
37. Indications for vaccination.
38. Childhood vaccination schedule.
39. Anthroponotic intestinal infections.
40. Comparative characteristics of the epidemic process in acute intestinal infections depending on the pathogen transmission routes.
41. Preventive and anti-epidemic measures for acute intestinal infections.
42. Features of the epidemic process in aerosol infections with exanthema syndrome /measles, rubella, chickenpox/. Anti-epidemic measures.
43. Acute respiratory viral infections, peculiarities of the epidemic process in various nosological forms. Contents of preventive measures to prevent influenza.
44. Epidemiological characteristics of a group of airborne infections.
45. Epidemiological characteristics of a group of intestinal infections.
46. Organization and implementation of anti-epidemic measures in the foci of airborne infections.
47. Organization and implementation of anti-epidemic measures in the foci of intestinal infections.
48. The concept of a natural focus of an infectious disease. Reservoirs of pathogens.
49. Vectors of pathogens of natural focal diseases. Mechanism of human infection.
50. Typhus. Main clinical manifestations, epidemiology. Diagnostic methods, anti-epidemic measures.
51. Sanitary protection of the territory, quarantine measures, their importance in the protection of the state from infectious diseases.
52. Basic concepts of hospital epidemiology. Definition of nosocomial infections (HAIs).
53. Epidemic Process in Various Traditional HAIs: Sources, Factors and Routes of Infection in Acute Intestinal, Airborne Infections, Viral Hepatitis and HIV Infection.
54. Etiology of nosocomial infections, "hospital" strains of pathogens.
55. Possible sources of infection in nosocomial infections.
56. Modes and factors of infection transmission in nosocomial infections.
57. Populations at increased risk of hospital-acquired infections.
58. The concept of the anti-epidemic regime of the hospital.
59. Preventive and anti-epidemic measures for the prevention of nosocomial infections.

60. Diagnostics and prevention of nosocomial (nosocomial) infections in medical institutions.

**Criteria for Grading a Student in the Exam
in the discipline "Current issues of epidemiology"**

Exam Assessment	Requirements for the formed competencies
"Excellent"	An "excellent" grade is given to a student if he/she has deeply and firmly mastered the program material, comprehensively, consistently, clearly and logically coherently presents it, 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 answer when changing tasks, uses the material of monographic literature in the answer, correctly justifies the decision made, has versatile skills and methods of implementation practical tasks;
"Good"	A grade of "good" is given to a student if he/she knows the material well, presents it competently and to the point, without making significant inaccuracies in the answer to the question, correctly applies theoretical provisions in solving practical issues and problems, has the necessary skills and techniques for their implementation;
"Satisfactory"	A grade of "satisfactory" is given to a student if he/she has knowledge only of the main material, but has not mastered its details, makes inaccuracies, insufficiently correct formulations, violations of the logical sequence in the presentation of the program material, has difficulties in performing practical work;
"Unsatisfactory"	An "unsatisfactory" grade is given to a student who does not know a significant part of the program material, makes significant mistakes, is uncertain, and performs practical work with great difficulty.

Assessment Tools for Ongoing Attestation

Typical tasks for practical exercises:

Type 1. Answer the theoretical questions:

1. Define the terms "outbreak", "epidemic", "pandemic".
2. What are sporadic, epidemic, endemic and exotic morbidity?
3. List the mechanisms of transmission of infectious diseases.
4. What factors influence the epidemic process?
5. What are the principles of organizing preventive and anti-epidemic measures?

Type 2. Solve situational problems:

Task 1

Patient K., 35 years old, hospitalized in the infectious diseases department, was diagnosed with viral hepatitis A. 2 weeks after hospitalization, a child turned to

the district pediatrician with complaints of headache and fever. An acute respiratory illness was diagnosed. After 3 days, the child developed ictericity of the sclera, and the urine darkened. Viral hepatitis was diagnosed.

During the epidemiological investigation of the case, it was found that surveillance of contacts, their laboratory examination, sanitary and educational work in the focus were not carried out; The general practitioner and the pediatrician were not informed about the presence of a focus of viral hepatitis.

What measures had to be taken at home in connection with the registration of the first case of viral hepatitis A?

Task 2

A victim of a bite from a domestic dog turned to the trauma center. He has a full course of immunization against tetanus, the last vaccination was 6 years ago.

What infectious diseases does it need to prevent? What measures should be taken for this purpose?

Task 3

An outbreak of Sonne shigellosis has been reported in the kindergarten. The disease is associated with the consumption of sour cream.

What is the possible source of infection and transmission factors?

Evaluation criteria (written/oral report, abstract, communication, essay, including those made in the form of presentations)

An "excellent" grade is given to a student if the student has expressed his opinion on the formulated problem, argued it, accurately determining its content and components. The data of domestic and foreign literature, statistical data, information of a regulatory and legal nature are given. The student knows and possesses the skill of independent research work on the research topic; methods and techniques of analysis of theoretical and/or practical aspects of the field under study. There are no factual errors related to understanding the problem; Graphically, the work is formatted correctly

Assessment "good" - the work is characterized by semantic integrity, coherence and consistency of presentation; no more than 1 mistake was made in explaining the meaning or content of the problem. For argumentation, data of domestic and foreign authors are given. Research skills and abilities are demonstrated. There are no factual errors related to understanding the problem. One or two mistakes were made in the design of the work.

Grade "satisfactory" - 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 involved. No more than 2 mistakes were made in the meaning or content of the problem, the design of the work

The rating is "unsatisfactory" - if the work is a paraphrase or completely rewritten source text without any comments or analysis. The structure and theoretical component of the topic are not disclosed. Three or more than three mistakes were made in the semantic content of the problem being disclosed, in the design of the work.

Assessment Tools for Ongoing Attestation

The control tests are intended for students studying the course "Legal Issues in Medicine".

When working with tests, you are asked to choose one answer option out of three or four proposed. At the same time, the complexity of the tests is not the same. Among the proposed tests, there are tests that contain several options for correct answers. The student needs to provide all the correct answers.

The tests are designed for both individual and collective solutions. They can be used in the process of both classroom classes and independent work. 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. An "excellent" grade is given if you answer more than 90% of the tests offered by the teacher. A "good" score is given if you answer correctly on more than 70% of the tests. Grade "satisfactory" – with a correct answer to 50% of the proposed

Sample test tasks

1. EPIDEMIOLOGY IS THE STUDY OF:

- 1) Infectious diseases
- 2) pathogens of infectious diseases
- 3) regularities of the epidemic process
- 4) Infectious process

2. THE MANIFESTATION OF THE EPIDEMIC PROCESS IS:

- 1) acute illness
- 2) chronic illness
- 3) sporadic and epidemic morbidity
- 4) severe form of the disease

3. THE TERM "SPORADIC MORBIDITY" MEANS THE FOLLOWING DISEASES:

- 1) Single

- 2) group
- 3) Mass
- 4) Specific to the area

4. EXOTIC INFECTIONS ARE INFECTIOUS:

- 1) diseases that are not specific to the area
- (2) Diseases peculiar to the locality
- 3) viral diseases spread by arthropods
- 4) Mass diseases

5. THE FIRST LINK IN THE EPIDEMIC PROCESS:

- 1) Susceptible organism
- 2) Transmission mechanism
- 3) source of infection
- 4) Transmission Way

6. THE SOURCE OF INFECTION MAY BE:

- 1) Patients and bacterial carriers
- 2) Foodstuffs
- 3) Water
- 4) Insects

7. THE SOURCE OF THE CAUSATIVE AGENT IS:

- 1) any objects on which the pathogen is found
- 2) a live infected organism of a person or animal
- 3) any environment in which the pathogen persists for a long time
- 4) Carriers

8. THE FOLLOWING ARE VERY DANGEROUS AS A SOURCE OF INFECTION:

- 1) patients with a severe course of the disease
- 2) patients with a mild course of the disease, chronic bacterial carriers
- 3) transient bacterial carriers
- 4) patients with exotic diseases

9. THE GREATEST EPIDEMIOLOGICAL DANGER IS POSED BY PATIENTS WITH THE FOLLOWING FORMS OF THE DISEASE:

- 1) Mild atypical
- 2) Heavy
- 3) manifest
- 4) Typical

10. THE GREATEST DANGER AS A SOURCE OF INFECTION IS:

- 1) Sick person
- 2) Bacterium carrier
- 3) Healthy Person

4) Convalescent

Test Evaluation Criteria

Assessment is carried out in an e-learning session on a hundred-point scale. The test includes 100 tasks, the maximum test score is 100. Within the framework of the current level of knowledge assimilation in the discipline, a test result of at least 61 points is allowed.