



MINISTRY OF SCIENCE AND HIGHER EDUCATION OF THE RUSSIAN FEDERATION
Federal State Autonomous Educational Institution of Higher Education
Far Eastern Federal University
(FEFU)
INSTITUTE OF LIFE SCIENCES AND BIOMEDICINE (SCHOOL)

VALUATION FUND

in the discipline (module) "Health of the region's population and health priorities"

Area of study 32.04.01 Public Health

*Master's program "Leadership and governance in public health" (program in
English for foreign citizens)*

Vladivostok 2023

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
Organizational and managerial	PC-3 Ability to organize, plan and control the activities of a structural unit of a medical organization	PC-3.1 Knows Standards of Care PC-3.2 Is able to assess the resources of a medical organization and implement a quality management system PC-3.3 Possesses the necessary skills in the preparation of reporting documentation, assessment of the activities of a health care institution
Organizational and managerial	PC-5 Ability to assess the effectiveness of a medical organization, develop and select optimal management solutions, develop a business plan for the development of a medical organization, use a process approach in the management of a medical organization, use technological maps of the processes of a medical organization	PC-5.1 Knows the methods of planning a medical organization PC-5.2 Is able to draw up a plan for a medical organization, develop business planning and investment projects PC-5.3 Proficient in planning, development of business planning and investment projects

Code and name of the competency indicator	Name of the assessment indicator (the result of learning in the discipline)
PC-3.1 Knows Standards of Care	Knows the standards of medical care Knows how to provide first aid Proficient in first aid
PC-3.2 Is able to assess the resources of a medical organization and implement a quality management system	Knows the quality management system of a medical organization Is able to assess the resources of a medical organization and implement a quality management system Proficient in assessing the resources of a medical organization and implementing a quality management system
PC-3.3 Possesses the necessary skills in the preparation of reporting documentation, assessment of the activities of a health care institution	Knows the reporting documentation of the medical organization Is able to prepare reporting documentation for a medical organization Possesses the necessary skills for the preparation of reporting documentation, assessment of the activities of a health care institution
PC-5.1 Knows the methods of planning a medical organization	Knows the methods of planning a medical organization Able to plan the work of a medical organization

PC-5.2 Is able to draw up a plan for a medical organization, develop business planning and investment projects	<p>Knows the rules for drawing up a plan for a medical organization, developing a business plan, an investment project</p> <p>Is able to draw up a plan for a medical organization, develop business planning and investment projects</p> <p>Possesses the skill of drawing up a plan for a medical organization, developing business and investment projects</p>
PC-5.3 Proficient in planning, development of business planning and investment projects	<p>Knows the principles of goal-setting, types and methods of organizational planning and fundamental concepts of financial management, as well as the method of process approach to the management of a medical organization</p> <p>Able to develop corporate, competitive and functional strategies for the development of the organization, develop investment projects and conduct their verification</p> <p>He is proficient in the methods of formulating and implementing strategies at the level of a business unit, developing and implementing marketing programs, as well as methods of investment analysis and analysis of financial markets, a process approach in the management of a medical organization and the possibility of using technological maps of the processes of a medical organization.</p>

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 Methods of investigation of sources of environmental pollution and public health	PC-3.1; PP-3.2; PP-3.3; PP-5.1; PC-5.2; PC-5.3	Knows	Interview UO-1, abstract PR-4,	Exam Questions 1-25
			Can	Tests PR-1, essay PR-3, situational case problems PR-11, presentation	
			Owens	Small Group Work, LA-3 Reports	
2	Section 2 Body's Defense Systems and Protection of Humans from the Harmful Effects of the External Environment	PC-3.1; PP-3.2; PP-3.3; PP-5.1; PC-5.2; PC-5.3	Knows	Interview UO-1, abstract PR-4,	Exam Questions 26-51
			Can	Tests PR-1, essay PR-3, situational case problems PR-11, presentation	
			Owens	Small Group Work, LA-3 Reports	

Scale for assessing the level of competence formation

Code and Competency Statement	Stages of competence formation		criteria	Indicators	Points
PC-3 Ability to organize, plan and control the activities of a structural unit of a medical organization	Knows (Threshold)	Fundamentals of planning, organization and implementation of the activities of a structural unit of a medical organization	Knowledge of the basics of planning and control of the activities of a structural unit of a medical organization	Ability to draw up the necessary documentation for planning and controlling the activities of a structural unit of a medical organization	61-70
	Can (Advanced)	analyze and evaluate the performance indicators of a structural unit of a medical organization	Ability to analyze and evaluate the performance indicators of the structural unit of the medical organization	ability to substantiate the criteria for evaluating the organization, planning and control of the activities of a structural unit of a medical organization	71-84
	Proficient (High)	Skills Preparation of the justification of the volumes medical care in accordance with the necessary resources in the structural unit of the medical organization	methods of justifying the volume of medical care in a structural unit of a medical organization	ability to prepare the necessary calculations for the organization, planning and control of the activities of a structural unit of a medical organization	85-100
PC-5 Ability to assess the effectiveness of a medical organization, develop and select optimal management solutions, develop a business plan for the development of a medical organization, use a process approach in the management of a medical organization, use	Knows (Threshold)	Principles of goal-setting, types and methods of organizational planning and fundamental concepts of financial management	Knowledge of the basic concepts of research processes, including business processes in medicine	Ability to explain the main stages of research of a business plan of a medical organization, a process approach in the management of a medical organization	61-70
	Can (Advanced)	develop corporate, competitive and functional strategies for the development of the organization, develop investment projects and conduct their	ability to analyze and compare the stages of the process of strategic development of a medical organization,	ability to develop investment projects and conduct their verification based on the use	71-84

technological maps of the processes of a medical organization		verification	business planning and the use of technological maps of the processes of medical activities	of a process approach in the management of a medical organization and the use of technological maps of the processes of medical activities	
	Proficient (High)	methods of formulating and implementing strategies at the level of a business unit, developing and implementing marketing programs, as well as methods of investment analysis and analysis of financial markets.	methods of collecting, processing, analyzing information and their presentation for the implementation of business strategies of a medical organization using technological maps of medical activity processes	Ability to formulate the main stages and explain the tasks for the implementation of marketing programs and analysis of financial markets using the process approach in the management of a medical organization and the use of technological maps of the processes of medical activities	85-100

Scale for assessing the level of achievement of learning outcomes for current and intermediate certification *in the discipline*

Points (rating score)	Levels of achievement Training		Requirements for the formed competencies
	Current & Intermediate certification	Intermediate Attestation	
100 – 86	Increased	"Passed" / "Excellent"	Freely and confidently finds reliable sources of information, operates with the information provided, has excellent skills in analyzing and synthesizing information, knows all the basic methods of solving problems provided for in the curriculum, knows typical mistakes and possible difficulties in solving a particular problem and is able to choose and effectively apply an adequate method for solving a particular problem. trouble
85 – 76	Base	"Passed" / "Good"	In most cases, he is able to identify reliable sources of information, process, analyze and synthesize the proposed information, choose a method for solving a problem and solve it. Makes single serious mistakes in problem solving, experiences difficulties in rare or difficult cases of problem solving, does not know typical mistakes and possible difficulties in solving this or that trouble
75 – 61	Threshold	"Passed" / "Satisfied"	Makes mistakes in determining the reliability of sources of information, is able to correctly decide only Typical most often Occur trouble in (process information, choose a method to solve a problem, and solve it)
60 – 0	Level Not Reached	"Failed" / "Unsatisfactorily"	Does not know a significant part of the program material, makes significant mistakes, performs practical work unconfidently, with great difficulty.

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

Current assessment of students. Current certification of students in the discipline "The region's population and health priorities" is carried out in accordance with the local regulations of FEFU and is mandatory.

Current attestation in the discipline "The region's population and health priorities" 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 attestation of students. Intermediate certification of students in the discipline "The region's population and health priorities" is carried out in accordance with the local regulations of FEFU 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 attestation in the discipline "The region's population and health priorities" 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. OECD Programme on Environmental Security and Health: Subject. Place in the system of biology and natural sciences as a whole.

2. The importance of the OECD Programme on Environmental Security and Health for modern society. Research methods: field observations, experiments, theoretical modeling.

3. History of the OECD Programme for Environmental Safety and Health.

4. Environmental factors. General patterns of their action on organisms. Metabolism in the "environment-organism" system. Classifications of factors. Dividing factors into resources and conditions.

5. Basic regularities of action of abiotic factors. The Law of the Limiting Factor The Combined Action of Factors.

6. Light as an environmental factor. The importance of light in the life of plants and animals.

7. Temperature as an environmental factor. Ectothermic organisms. Effective temperatures for the development of plants and poikilothermic animals.

8. Water as an environmental factor. The concept of humidity of the environment. Water in terrestrial habitats.

9. Living organisms as a habitat. Parasitism. Variety of forms of parasitism. Basic ecological adaptations of internal parasites. Ecological Specificity of External Parasitism.

10. The Doctrine of the Biosphere. Works by V.I. Vernadsky. The biosphere as a global ecosystem.

11. Characteristics of populations. Population definition. Population as a biological system. Population structure of the species. Population boundaries.

12. Static and dynamic indicators.

13. Demographic structure of populations. Sexual composition, its genetic and age-related dynamics

14. Homeostasis of populations. Self-thinning in plants. Cannibalism in animals. Inhibition by metabolic products. Territoriality as a Mechanism for Removing Overpopulation in Animals. The role of dispersal migrations in the regulation of population numbers, physiological changes in individuals in connection with population density.

15. Nuclear Energy, Prospects of Its Development, Problems of Nature Protection.

16. Anthropogenic Change of Natural Complexes in the Creation of Hydroelectric Power Plants.

17. Non-traditional ways of producing energy.

18. Classification of the main pollutants - physical, chemical, biological.

19. Transport pollution of the atmosphere. The phenomenon of photochemical smog.

20. Consequences of environmental pollution by heavy metals.

21. Ways of movement and accumulation of pollutants in the biosphere.
22. Pollution standardization (MPC, MPE, PDS).
23. Methods and methods of treatment of industrial effluents and emissions - physical, chemical, biological.
16. Major groups of OECD programmes
17. Risk Management Methods in the Framework of OECD Programs.
18. Basic Methods for Determining the Safety of Chemicals
19. Economic mechanisms of rational use of natural resources.
20. International cooperation in the field of environmental protection.

Exam Grading Criteria

in the discipline "Health of the region's population and health priorities"

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

The control tests are intended for Master's students studying the course "Health of the region's population and health priorities".

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. All correct answers must be provided.

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. The grade is "satisfactory" – with a correct answer to 50% of the proposed tests.

Sample test tasks

Choose one or more correct answers

1. Official founder of ecology:

- 1) Humboldt
- 2) Haeckel*
- 3) Mobius
- 4) Darwin
- 5) Lovetsky

2. The subject of the study of ecology is:

- 1) Man
- 2) Environment
- 3) Living organisms
- 4) the relationship between living organisms and the environment
- 5) the relationship between man and the environment*

3. Ecology was formed as an independent scientific discipline in the

- 1) XVIII century
- 2) XX century
- 3) XXI century
- 4) XIXth century *
- 5) Middle Ages

4. Contribution to the formation and development of ecology was made by

- 1) Sukachev
- 2) Vernadsky*
- 3) Zakharyin
- 4) Pirogov
- 5) Liebig*

5. Main directions of ecology:

- 1) Reducing the incidence of human disease
- 2) Monitoring of the state of nature*
- 3) development of forecasts of changes in the biosphere*
- 4) improvement of medical and demographic indicators
- 5) formation of an ideology that helps to solve environmental problems*

6. The biosphere is:

- 1) Homo sapiens population
- (2) the totality of all populations
- 3) Noosphere
- 4) Living organisms in interaction with the environment*
- 5) Animals, Plants and Microorganisms*

7. The Largest Ecosystem Is:

- 1) City
- 2) Country
- 3) Forest
- 4) river
- 5) biosphere*

8 The Doctrine of the Noosphere Created

- 1) Sukachev
- 2) Tensley
- 3) Shelford
- 4) Dokuchaev
- 5) Vernadsky*

9. The ecosystem consists of

- 1) abiotic and biotic parts*
- 2) producers, consumers and decomposers
- 3) biogenic, bioinert and inert substances
- 4) plants, animals and microorganisms
- 5) People and the environment

10. The laws of rational use of natural resources were proposed by

- 1) Darwin*
- 2) Linnaeus*
- 3) Commoner*
- 4) Malthus*
- 5) Liebig

11. Global Environmental Issues

- 1) Depletion of natural resources*
- 2) extermination of certain species of animals and plants
- 3) demographic crisis

4) pollution of the environment with waste*

(5) Terrorism

12. The totality of living organisms of the biosphere -

1) Biotope

2) Biota*

3) Community

4) Population

5) Biogeocenosis

13. The term "Biogeocenosis" was first proposed by

1) Vernadsky

2) Moebius*

3) Sukachev

4) Liebig

5) Tensley

14. Producers in ecosystems are

1) Plants*

2) herbivorous animals

3) Carnivorous animals

4) microorganisms*

5) Worms

15. Decomposers in ecosystems are

1) Bacteria*

2) Animals

3) Plants

4) Mushrooms*

5) Protozoa

16. Living Organisms Processing Dead Creatures

1) first-order consumers

2) Decomposers*

3) Producers

4) Second-order consumers*

5) population

17. Biotic environmental factors are

1) Orographic*

2) edaphogenic*

3) Zoogenic*

4) anthropogenic

5) Phytogenic*

18. 3 Characteristics of Ecological Balance:

- 1) constancy of species composition*
- 2) constancy of environmental conditions*
- 3) Consistency of nutrient cycles
- 4) full use of the energy supplied to the ecosystem
- 5) No waste pollution*

19. Population size depends on 2 factors

- 1) the importance of this species for the biosphere*
- 2) Stability of the species*
- 3) Reproduction rate*
- 4) biotic potential
- 5) Medium resistance

20. The number of links in the trophic chain is limited due to

- 1) Lack of solar energy
- 2) Dissipation of energy in the form of heat
- 3) lack of food*
- (4) Human intervention*
- 5) predators and parasites

21. The main type of relationships between organisms of different trophic levels is:

- 1) Competition
- 2) predation
- 3) Symbiosis*
- 4) mutual assistance
- 5) Do not exist

22. The essence of the biological cycle is:

- 1) Predation
- 2) Use of solar energy*
- 3) Coal, oil and gas combustion
- 4) Photosynthesis*
- (5) human activity

23. Principles of functioning of natural ecosystems:

- 1) Being Powered by Solar Energy*
- (2) Existence on the energy of the fuel burned
- (3) the presence of a circulation of substances*
- 4) reduction of biomass during the transition to a new trophic level
- 5) increase in biomass at the transition to a new trophic level

24. 3 main directions for solving environmental problems:

- 1) improving the quality of medical care for the population
- 2) development of wastewater treatment facilities*

- 3) adoption of laws on nature protection*
- 4) normalization of the level of anthropogenic load*
- 5) non-interference of man in the environment

25. Types of physical pollution of the environment:

- 1) Radioactive*
- 2) Chemical
- 3) Light*
- 4) Noise*
- 5) Electromagnetic*

26. Formulations of Vernadsky's laws:

- 1) the law of constancy of the living matter of the biosphere*
- 2) The Law of Conservation of Energy
- 3) The Law of Biogenic Migration of Atoms
- (4) the law of non-removable waste
- 5) the law of maximum biogenic energy

27. Directions of modern development of ecology

- 1) Scientific
- 2) Integrating
- 3) Environmental*
- 4) Worldview
- 5) Independent

28. Knowledge of ecology is necessary for:

- 1) to understand the general environmental situation
- 2) for carrying out environmental activity*
- 3) to work in a pharmaceutical company
- 4) for analytical control of pharmaceutical production waste

29. Which definition of "health" is correct?

- (a) Absence of pathology detected by modern research methods.
- b) a state of complete physical, mental and social well-being, and not merely the absence of pathology.
- c) the state of the organism in which its physiological mechanisms provide it with adaptation to environmental conditions.

30. What are the names of the factors that affect nature as a result of human activity?

- (a) Abiotic.
- b) isothermic.
- c) biotic.
- d) anthropogenic

31. What is the basis of primary prevention?

- (a) Examination of healthy people exposed to adverse environmental factors.
- b) complete elimination of the harmful factor or reduction of its impact to a safe level.
- c) hygienic regulation of environmental factors.
- d) a set of measures to prevent complications of diseases, rehabilitation and treatment.
- e) the use of antidotes by residents of ecologically disadvantaged regions.

32. List the steps by which the risk of exposure to environmental factors on human health is assessed:

- (a) Risk profile.
- b) Evaluation of exposure.
- c) identification of harmful factors and assessment of their danger.
- d) assessment of the dose-response relationship.
- e) risk management.

33. What is the State system for monitoring the quality of the environment and the health of the population?

- (a) A system of sanitary and epidemiological standardization.
- b) hygienic diagnostics.
- c) social and hygienic monitoring.
- d) Federal System of Hydrometeorological Monitoring.
- e) risk assessment methodology.

34. Endemic diseases are those that arise as a result of:

- (a) Lack of minerals in the water.
- b) excess minerals in water, plants or soil.
- c) lack or excess of mineral substances in water, plants or animal organisms, soil in a limited area.
- d) as a result of a lack or excess of mineral substances in water, plants or animal organisms, soil.

35. The medical efficiency of health care may be measured by such indicators as:

- (a) Prevalence of disease
- b) "Health Index"
- c) the use of new technologies for diagnosis and treatment
- d) lethality.

36. The effectiveness of health care is considered in the following aspects:

- A. Medical efficacy
- B. Social Efficiency
- in. _____

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.

Criteria for evaluating the abstract

- 100-86 points are given if the Master's 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 Master's 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 Master's 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.