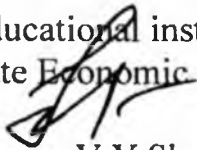


Educational institution
“Belarus State Economic University”

APPROVED

Rector of Educational institution
“Belarus State Economic
University”

21.12  V.Y. Shutsilin
Registration No UD ~~4658-201~~ st.

PHILOSOPHY AND METHODOLOGY OF SCIENCE

The program-minimum of
the candidate examination in general education

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RECOMMENDED FOR APPROVAL:

by Department of Philosophy of Belarus State Economic University
(Protocol №. 2 of 29 September, 2020);

by Scientific and Methodological Council of Belarus State Economic
University (Protocol № 2 om 16.12 2020).

Explanatory note

The Program Minimum is for students who master the study program of the second level of higher education, which forms knowledge, skills and abilities of scientific and pedagogical work as well as research work and provides the Master's degree; post-graduate students mastering the postgraduate program, which provides the scientific qualification "Researcher"; for students enrolled in the university at the first stage of postgraduate education in the form of joint research or passing candidate examinations (differentiated credits) and candidate examinations in general educational subjects (hereinafter referred to as students).

The Program-minimum is designed to deepen the world outlook and general methodological training of young scientists. It preserves the tradition existing in the national Universities, according to which the successful training of scientific and pedagogic staff presupposes a systematic study of philosophy and the shaping on this background skills of reflexive and methodological thinking.

In present-day situation the role and meaning of philosophical and methodological training of young scientists increases greatly. The frontal implantation of the science and modern information technologies in the most important spheres of the social activities, the globalization of the social and economic development of the modern society, permanent worsening of the ecological problems, rise of the multiply centers of regional tension connected with the processes of transformation and modernization of post socialistic and developing states— these and many other phenomena rise the problems of philosophical, world outlook, logical and methodological level. Their professional and creative comprehension requires serious and accentuated trainings of future scientists and teachers.

The relevance of such training is determined by the strategic tasks that our country is called upon to solve today. Orientation towards the innovative development of the Belarusian economy and the frontal implantation of high technologies into many spheres of social life require from future specialists not only profound professional knowledge, but also the ability to adequately assess the role and influence of the scientific and technological innovations on the development of the Belarusian society in general and on the life of each member of the society.

The development of modern science opens the possibility not only "to subjugate" and change the world around a person, but also to invade a person's inner world: to correct his genetic basis or manipulate his consciousness, to construct his inner world, thereby depriving a person of the right to freedom of choice. Therefore, much attention in the studying of the course "Philosophy and Methodology of Science" is given to the constructive-critical understanding of the human's problems, science and technology, society and culture, ecology and the information revolution, etc.

In present-day situation, the responsibility of scientists for scientific discoveries and their consequences increases greatly. A scientist performs many social functions such as being a member of the society and a citizen of a certain state.

The main purposes of the Program Minimum are:

- forming of modern world outlook and integral vision of the world, based on humanistic ideas and principles of activity;
- forming of the foundations of the world and national philosophical culture in the system of scientific outlook of the students;
- forming of the critical and creative thinking ability in the socio-transformational and professional activities of a young scientist, mastering a modern style of scientific, practical and rationally-oriented thinking;
- forming of young scientists' skills and abilities to clearly formulate and philosophically justify their social, political and life positions.

The aim of the Program Minimum is to form relevant philosophical competences in students (subject-matter and operational competences).

The formation of subject-matter competences is carried out on the basis of studying the general educational course "Philosophy and Methodology of Science".

On completion of this program, students should know:

- the philosophical and ideological problems in the context of the values of the modern civilization;
- the conceptual models of philosophical and methodological analysis of the science;
- the philosophical and methodological problems of discipline-organized science;
- the conceptual content and methodology of new research tasks in the field of the contemporary philosophical problems and their evidence-based solutions;
- a complex of system methods and philosophical and methodological principles of modern scientific research and the content of the specifics of their application in professional activity;
- the content of the conceptual apparatus and methodology from the field of theory and practice of argumentation.

Operational philosophical competences of students can be identified correlatively to subject-matter competences of students, who should be able to:

- analyze and assess the content and level of philosophical and methodological problems in solving social and professional tasks;
- use in professional research and pedagogical activity knowledges of the history of the development of modern philosophical trends and about the latest trends in foreign philosophy;
- put forward independent hypotheses and innovative ideas, to carry out a critical analysis, generalization and systematization of scientific

information, to set research objectives and choose the best ways and methods to achieve them;

- develop new research methods in relation to the scientific and production profile of activity;

- carry out scientific researches in compliance with the principles of academic ethics, accepting personal responsibility for objectives, means and results of scientific work;

- exercise creativity and scientific research in the context of a multidisciplinary approach to solving practical and fundamental scientific problems.

The general educational course "Philosophy and Methodology of Science" presupposes a conceptual comprehension of contemporary world processes and is designed to help scientists to determine their social and civic positions, to realize that contemporary science places high requirements on personal qualities, ideological and value orientations of scientists.

The Program-minimum is focused on the philosophical and methodological support of the scientific and professional activities of young scientists and their creative interpretation of the corresponding philosophical problems, which directly relates to the issues of logic, methodology, sociology of science and education.

A distinctive feature of the general educational course "Philosophy and methodology of science" is its accentuated focus on the problems and content of modern philosophical and methodological thought, on the study of the most significant and relevant ideas and concepts developed in postclassical philosophy and methodology of science. One of the main tasks is to create in the students the sustainable skills of reflective culture of thinking and understanding the possibilities of modern methodological consciousness.

In the Program-minimum the special attention is given to the fact that at the beginning of the 21st century the problematic field of philosophy has considerably expanded: new topics and subjects have appeared in it, new solutions of the "eternal" philosophical problems proposed by modern philosophy and science are emphasized.

The Program-minimum includes certain didactic goals. It is focused on actualization and development of creativity and project thinking of students, it assumes their considerable self-preparation, exchange of opinions, discussions. In the Program-minimum, emphasis is placed not on ready-made solutions, but on ways of posing problems of philosophy and methodology of science, in the solution of which the future scientists are called upon to contribute.

The Program-minimum is developed using the traditions of scientific researches in the field of philosophical and methodological problems created by the efforts of several generations of Belarusian scientists and philosophers.

The study of the general educational course "Philosophy and Methodology of Science" is designed for 240 hours, including 104 class hours (60 hours for lectures and 44 hours for seminars. Current certification form - candidate exam.

THE CONTENT OF THE GENERAL EDUCATIONAL COURSE "PHILOSOPHY AND METHODOLOGY OF SCIENCE"

PART I

PHILOSOPHY AND VALUES OF MODERN CIVILIZATION

Topic 1. The status and mission of philosophy in the life of society

Philosophy, outlook, culture. The nature of the philosophical problems. Philosophy as personal knowledge and rational and critical form of world view. A problem of scientific character of philosophy. Cultural traditions of the East and the West and types of philosophical thinking. Philosophy and national consciousness. Specificity of philosophical thought of Belarus and Russia. The basic research strategies in post-classical West European philosophy.

Multidimensionality of a philosophy phenomenon. Social and cultural status and functions of philosophy in the modern world of cultural variety. The role of philosophy in forming of person's valuable orientations and principles of modern scientific thinking.

Topic 2. Philosophical understanding of the problem of being

The search of the metaphysical bases being in various philosophical systems. Ontology as a philosophical doctrine about being and its interpretation in philosophy. Fundamental categories of being and their interrelation. Ontology of human subjectivity and culture in non-classical philosophy.

Being and matter. Evolution of ideas about matter. Modern science about matter structure. Motion as an attribute of matter. Philosophy and science about the diversity of forms of motion of matter.

Spatial and temporal organization of a material world. Substantial and relational concepts of space and time. Specificity of biological and social space and time. Being of Man and Time.

Topic 3. Philosophy of global evolutionism

System-evolutionary paradigm in modern philosophy and natural science. Dynamic organization of being: motion and development. The problem of development as a subject of philosophical reflection. Dialectics as the philosophical theory of development. Understanding of dialectics in the history of philosophy: ontological, gnoseological and logical aspects of dialectics. Modern discussions about dialectics and its place in the structure of philosophical knowledge. Social dialectics, its features and world view status.

The idea of evolution in inorganic nature and the theory of non-stationary universe. Dialectics and synergetics. A role of synergetics in understanding of evolutionary processes. Concept of the biosphere and the modern theory of evolution. Global evolutionism and noosphere. Heuristic potential of global

evolutionism and problems of the development in modern scientific picture of the world.

Topic 4. The problem of Man in philosophy

Concept of philosophical anthropology and the basic strategies of human cognition in philosophy and science. Multidimensionality of Man phenomenon. Images of Man in the history of philosophy and culture.

Origin of Man. The basic concepts of anthroposociogenesis. Man as a unity of biological, social and spiritual being. Corporeality and spirituality of Man. The problem of essence and existence of Man. An individual, individuality and personality.

Axiological parameters of Man's being in the world. A phenomenon of subjectivity and existential experience of Man. Freedom and responsibility as existential opposition in Man's being. A personal choice and a problem of life meaning of Man. Philosophical understanding of death and immortality phenomena. Man in the system of social communications. Man and values of mass culture. Anthropological crisis as the phenomenon of a modern technogenic civilization. Transhumanism and man's perspective.

Topic 5. Specificity of social reality

A place of social philosophy in the system of philosophical knowledge. Social philosophy and social-humanitarian disciplines in the study of society. Concept of social reality. Society as a system. Main features of the sphere approach to the study of society. Main spheres of society: the economic sphere, the social sphere, the political sphere and the spiritual sphere. Concept of social structure of the society. Types of social structures. Modern concepts of social stratification.

The basic research strategies of social reality in modern philosophy. The Marxist conception of society. M. Weber's social action theory. Society as a product of social rationalization. Society model in the T. Parsons' concept of structural functionalism. Social rationality and communicative action in J. Habermas's theory.

Topic 6. The main problems of social dynamics

Society as a developing system. The problem of sources and driving forces of social dynamics. Base factors of social evolution. The nature of social contradictions, conflicts, revolutions and reforms.

The problem of objectivity and subjectivity in the historical process. The status and functions of the social subject. State as a specific subject of social action. Modern technologies of public administration. The role of the individual and the masses in history. Social transformations and modernization, their role in

the development of modern societies. Modernization as an effective resource of the Belarusian model of social and economic development.

The basic concepts and stages of the development of philosophy of history. Variability in social development. Historical alternatives and a choice of ways of development of society. Linear and non-linear interpretations of the historical process. Formational and civilizational paradigms in the philosophy of history.

Concept of social progress. Criteria of progress. The basic concepts of social progress and their alternatives. Humanistic course of history and social progress.

Topic 7. Society development as a civilizational process

The phenomenon of civilization. The concept of civilization in the social and philosophical tradition. Essence and basic versions of the civilizational approach to history.

Types of civilizations in the history of society and problem of classification of civilizational systems. Local civilizations and the preservation of cultural and civilizational identity in the modern world. A dialogue of cultural traditions or "clash of civilizations". Pre-industrial (traditional), industrial and post-industrial types of civilizational development. Industrial society as a subject of social and philosophical analysis. Concept of technogenic civilization. Concept of post-industrialism in modern social philosophy. The phenomenon of information society.

Specific features of the western and eastern strategies of the civilizational process. East Slavic civilization, its features and development prospects. The basic preconditions and factors of consolidation of the East Slavic peoples. The problem of historical self-identification of Belarus and the basic vectors of the development of modern Belarusian society.

Topic 8. Philosophy of Culture

Concept of culture. The main paradigms of the philosophical analysis of culture (axiological, semiotic, activity-based, play-based, etc.). The structure of culture and its main functions. Traditions and innovations in the dynamics of culture. The problem of unity and variety of cultural and historical process. Globalization of the social and cultural space and dialogue of cultures.

Culture and spiritual life of the society. Spirituality and value forms of consciousness. Morality as the form of standard regulation of human behavior. Art and specificity of Man's aesthetic attitude to the world. Religion as the form of spiritual assimilation of the reality. Metamorphoses of spirituality in modern society. Social mythology, utopia, ideology and their role in the development of modern culture. Social and cultural foundations of the ideology of the Belarusian state. Universal human values and the problem of cultural and national identity.

PART 2

PHILOSOPHICAL AND METHODOLOGICAL ANALYSIS OF SCIENCE

Topic 9. Science as the major form of cognition in the modern world

Concept of science. Science as activity, social institute and system of knowledge. Forms of reflective understanding of scientific knowledge: cognition theory, methodology and logic of a science. Problem area of philosophy of science. Scientific and non-scientific knowledge. Specificity of scientific knowledge. A role of science in the life of modern society and in forming of personality.

Topic 10. Science in its historical development

Problem of the beginning of science. Science and types of civilizational development. Proto-science in the structure of traditional civilizations. An antique ideal of science. The process of the first scientific programs taking shape in ancient culture. Origin of empirical sciences. Registration of the disciplinary-organized science in the culture of the Renaissance and Modern Time. Concept of scientific rationality. Classical, non-classical and post-non-classical stages of the development of science. The basic social, cultural and methodological preconditions of modern science forming. Para-science phenomenon, conditions of origin and formation. Esoterism and deviant science.

Topic 11. Structure and dynamics of scientific knowledge

Empirical and theoretical levels of scientific knowledge, their unity and distinction. Structure of the empirical research. Concept of the empirical basis of scientific discipline. The fact as the form of scientific knowledge. Specificity of empirical generalizations and laws.

Concept of the scientific theory. Abstract objects of the theory and their system organization. "Ideal objects" in the structure of the scientific theory. Functions of the scientific theory. A problem and a hypothesis as forms of scientific search and knowledge growth.

The meta-theoretical bases of a science. A scientific picture of the world as a characteristic of subject-ontological structures of scientific research. Ideals and norms of a science. Style of scientific thinking concept. The philosophical bases of science and a problem of integration scientific knowledge into the culture of an epoch.

Dialectics of a developing science. Cumulative and anti-cumulative theories of scientific progress. Problems of rational reconstruction of scientific knowledge dynamics and the system nature of scientific progress. Science development as unity of the processes scientific knowledge differentiation and integration. Extensive and intensive stages in the development of scientific discipline. The nature of scientific revolution. Types of scientific revolutions. Modern strategies of scientific knowledge development.

Topic 12. Methodological toolkit of modern science

Concept of method and methodology. Multilevel concept of methodological knowledge. Specificity of the philosophical and methodological analysis of science. The status and functions of general scientific methodology of knowledge. Partial scientific methodology. Method and techniques of scientific research.

Essence of the system approach as general scientific methodological program. Forming of nonlinear methodology of knowledge. Pluralism of modern methodological strategies and methodological innovations in scientific knowledge. Opportunities and prospects of interdisciplinary methodology.

Scientific research in methodological understanding. Object and subject of research. The aim and objectives in the structure of scientific research. Means and methods of research. Structure, mechanisms of grounding and criteria of a scientific method. Methods of empirical research: observation, description, measurement, experiment. Methods of theoretical research: idealization, formalization, mental experiment, a hypothetic-deductive method, a method of a mathematical hypothesis.

Grounding of the research results. Grounding types (the proof, acknowledgement, interpretation, an explanation, etc.). Methods of scientific knowledge systematization (classification, type research, etc.). Science language. Definitions and their role in forming of scientific terminology. Objective language and a meta-language.

Topic 13. Science as social institute

Evolution of organizational forms of science. Science as a system of fundamental and applied researches. Phenomenon of the social need and strategy of science and research, experimental workings out (SREWO). The academic, branch and high school science: the purposes, problems and development prospects. Science and education. Schools in a science. Problem of continuity and alternation of generations in scientific community. Science in the culture of Belarus.

Scientists in the organizations. Concept of scientific community. Stratification structure of scientific community and a problem of "scientific democracy". Scientific hierarchy and an elite phenomenon in a science. Social mobility and change of the status of the scientist in a modern society.

Communication and its specificity in a modern science. Forms of scientific communications. A competition in a science. Conflicts in a science and ways of their settling. Problem of a dialogue in scientific community. Polemic and discussion as forms of communication in science. The argument, its structure, kinds and a role in scientific discussion. Culture of conducting scientific discussion.

Science and social technologies in a modern society. Praxeological function of science and basic types of social technologies: economic, political,

administrative, and educational. A science and the power. A science and a politics. A science and ideology. A problem of social regulation of research activity.

Topic 14. Science in the system of social values

The axiological dimension of science. Science as value in modern culture. Tool and world outlook value of a science. Scientism and anti-scientism in an estimation of the presence and future of the science. Intra-scientific values and sociocultural determination of science. Social values and norms of scientific ethos. Ambivalence of scientific consciousness. Problems of motivation and recognition in science.

Possibilities and borders of the science. Creative freedom and social responsibility of the scientist. Ethics of a science and its role in the forming of a modern type of scientific rationality. The social control over science. Prospects of development and new valuable reference points of a modern science.

PART 3. PHILOSOPHICAL and METHODOLOGICAL PROBLEMS OF the DISCIPLINARY-ORGANIZED SCIENCE

Topic 15. Social philosophy and methodological problems of social and humanitarian knowledge

Specificity of the object and subject of social and humanitarian knowledge. The main programs of the study of society in modern philosophy. Methodological features of social and humanitarian knowledge. Explanation and understanding in the structure of social and humanitarian knowledge. Social cognition and general scientific approaches. The problem of truth in social and humanitarian knowledge.

Topic 16. Philosophy of Economics

Subject and structure of philosophy of economics. Philosophy of Economics in the System of Social Sciences. Stages of formation and development of philosophy of economics. Socio-philosophical problems of property. Philosophy of money. Philosophical understanding of commodity-money fetishism. Personality and economics. The problem of social responsibility of business in the context of reforming society. Economic consciousness: essence, structure, functions and levels. Forms of economic ideology and economic psychology. Philosophical and legal problems of economic regulation.

Philosophical, methodological and socio-cultural problems of innovation.

Topic 17. Philosophy, science, man at the beginning of the third millennium

The problem of the "end of philosophy" in the past and present. Values and goals of philosophy in the postmodern era. Philosophical understanding of global problems. Processes of globalization, alter- and anti-globalization in philosophical understanding. Philosophy and environmental imperatives of modern civilization. Modernity as an era of changing paradigms of thinking and action. Prospects for the value revolution in the culture of the XXI century.

**EDUCATIONAL-METHODOLOGICAL CARD OF THE EDUCATIONAL DISCIPLINE "PHILOSOPHY AND
METHODOLOGY OF SCIENCE" FOR THE DAY FORM OF OBTAINING HIGHER EDUCATION OF THE
Hnd LEVEL**

Topic number	Section title, topics	Number of classroom hours						Other	Assessment
		Lectures	Practical lessons	Seminar lessons	Laboratory lessons	Number of hours SSS			
						Lecture	PI (SI)		
1	2	3	4	5	6	7	8	9	10
	Section I. Philosophy and values of modern civilization								
1.	The status and purpose of philosophy in the life of society	1				1	1		Oral survey
2.	Philosophical understanding of the problem of being	1		1		2	2		Preparation and discussion of abstracts, individual conversation with the teacher
3.	Philosophy of Global Evolutionism	1		1		2	1		Oral survey, individual conversation with the teacher
4.	The problem of man in philosophy	1		2		2	1		Oral survey, individual conversation with the teacher
5.	Specificity of social reality	1		0,5		2	1		Oral survey, individual conversation with the teacher
6.	The main problems of social dynamics	1		1		1			Preparation and

										discussion of abstracts, individual conversation with the teacher
7.	Development of society as a civilization process	1				0,5		2	1	Oral survey, individual conversation with the teacher
8.	Philosophy of culture	1						2	2	Express survey individual conversation with the teacher
	Section II. Philosophical and methodological analysis of science.									
9.	Science as the most important form of knowledge in the modern world	2				1		2	1	Oral survey
10.	Science in its historical development	2				1		2	1	Oral survey, preparation and discussion of abstracts
11.	Structure and dynamics of scientific knowledge	4				2		4	4	Oral survey, preparation and discussion of abstracts
12.	Methodological tools of modern science	2				2		4	2	Oral questioning, performing test tasks.
13.	Science as a social institution	2				1		2	1	Oral survey
14.	Science in the system of social values	2				1		2	1	Oral survey
	Section III. Philosophical and methodological problems of disciplinary-organized science									
15.	Social philosophy and methodological problems of social and humanitarian knowledge	1				2		2	1	Oral survey
16.	Philosophy of Economics	1				2		2	2	Express survey

17.	Philosophy, science, man at the beginning of the third millennium			2		2		2		Testing, individual conversation with the teacher
	Total hours	24				20		36		

LIST OF RECOMMENDED LITERATURE


Main literature:

1. Канке, В.А. Философия экономической науки: Учебное пособие / В.А. Канке. – М.: Инфра. – М, 2017. – 544 с.
2. Лукашевич В.К. Креативное взаимодействие предметного, нормативного и рефлексивного знания в научном поиске/ В.К.Лукашевич: Национальная академия наук Беларуси, Институт философии. – Минск: Беларуская навука, 2019. – 299 с.
3. Малыхина, Г. И. Философия и методология науки: учеб. пособие / Г. И. Малыхина, В. И. Чуешов, В. И. Миськевич. – Минск: БГУИР, 2017. – 274 с.
4. Светлов, В.А. Философия и методология науки: Учебное пособие / В.А. Светлов, И.А. Пфаненштиль. – М.: Инфра-М, 2019. –288 с.
5. Философия и методология науки: учебное пособие / Ч. С. Кирвель [и др.]; под ред. Ч. С. Кирвеля. – Минск: Вышэйшая школа, 2018. – 568 с.

Additional literature:

6. Кузьменко, Г. Н. Философия и методология науки: учебник для магистратуры /Г. Н. Кузьменко, Г. П. Отюцкий. – М.: Юрайт, 2016. – 450 с.
7. Бартенев, С.А. История и философия эконом.науки: Пособие. / С.А. Бартенев. – М.: Магистр, 2017. – 480 с.
8. Батурин, В.К. Философия науки: Учебное пособие / В.К. Батурин. – М.: Юнити, 2015. – 303 с.
9. Касавин, И.Т. Социальная философия науки. Идеи и дискуссии: монография. – М.: РОИФН, 2018. – 254 с.
10. Кохановский, В.П. Философия науки: Учебное пособие / В.П. Кохановский, В.И. Пржиленский, Е.А Сергодеева. –М.: Норма, 2017. – 416 с.
11. Методологический образовательный минимум: [пособие] / П.В. Кикель, И.Л. Прокопчик-Гайко. – Минск: Право и экономика, 2015. – 328 с.
12. Степин, В.С. Философия и методология науки / В.С. Степин. – М.: Академический проект, 2015. – 716 с.
13. Шишков, И.З. История и философия науки / И.З. Шишков. – М.: Ленанд, 2019. – 664 с.

PROTOCOL FOR THE AGREEMENT OF THE HEALTH EDUCATION PROGRAM

The name of the discipline, which approval required	Name Chairs	Suggestions about changes in the content of the curriculum institutions of higher education by academic discipline	The decision taken by the department that developed the curriculum (indicating the date and protocol numbers)
International competition	Department chair of International business		protocol No. from

Changes in program
for 20 / 20 year

№	Changes	Reason

Work program is reviewed and approved by Department _____ (minutes № __ from _____ 20).

Head of Department

Signature

Name

Approved:
Director of Institute of Masters Programs:

Signature

Name

Date