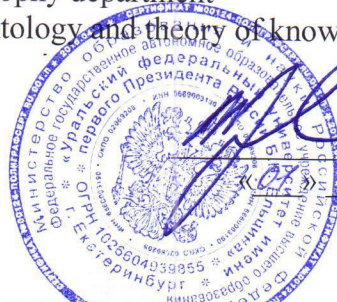


THE MINISTRY OF EDUCATION AND SCIENCE OF THE RUSSIAN FEDERATION
Federal State Autonomous Educational Institution
of Higher Professional Education
«Ural Federal University named after the first President of Russia B. N. Yeltsin»
Institute of Social and Political Sciences
Philosophy department
Sub-department of ontology and theory of knowledge





APPROVED
By Vice-Rector for Science
V. V. Kruzhayev
20 15.

SYLLABUS OF THE DISCIPLINE
HISTORY AND PHILOSOPHY OF SCIENCE
Recommended by Methodical Board of UrFU
For the following courses

EP code	Course	Curriculum number	Discipline code under the curriculum
01.06.01	Mathematics and Mechanics		Б.1.Б.1
02.06.01	Computer and Information Sciences		Б.1.Б.1
03.06.01	Physics and Astronomy		Б.1.Б.1
04.06.01	Chemistry		Б.1.Б.1
05.06.01	Geosciences		Б.1.Б.1
06.06.01	Biological sciences		Б.1.Б.1
07.06.01	Architecture		Б.1.Б.1
08.06.01	Engineering and construction technology		Б.1.Б.1
09.06.01	Informatics and Computer Engineering		Б.1.Б.1
10.06.01	Information Security		Б.1.Б.1
15.06.01	Mechanical engineering		Б.1.Б.1
18.06.01	Chemical Technology		Б.1.Б.1
20.06.01	Technosphere safety		Б.1.Б.1
21.06.01	Geology, exploration and development of mineral resources		Б.1.Б.1
27.06.01	Management in technical systems		Б.1.Б.1
37.06.01	Psychological sciences		Б.1.Б.1
38.06.01	Economics		Б.1.Б.1
39.06.01	Sociological sciences		Б.1.Б.1
41.06.01	Political and Regional Studies		Б.1.Б.1
42.06.01	Mass media, information and library science		Б.1.Б.1
44.06.01	Education and pedagogic		Б.1.Б.1
45.06.01	Linguistics and Literature		Б.1.Б.1
46.06.01	Historical sciences and archeology		Б.1.Б.1
47.06.01	Philosophy, Ethics and Religion		Б.1.Б.1
49.06.01	Physical Culture and Sports		Б.1.Б.1
50.06.01	Arts		Б.1.Б.1
51.06.01	Cultural Studies		Б.1.Б.1

Ekaterinburg, 2015

Authors of the syllabus of the discipline:

№ п/п	Full name	Academic degree, academic rank	Position	Chair	Signature
1	Bryanik Nadezhda Vasilyevna	Doctor of Philosophy, Professor	Professor	ontology and theory of knowledge ISPN	
2	Tomyuk Olga Nikolayevna	-	Senior lecturer	ontology and theory of knowledge ISPN	

Recommended by Methodical Board of UrFU

Chairman of Methodical Board of UrFU

Protocol № 15 from «17» April 2015 г.

Approved:

Head of the scientific and pedagogical staff preparation department




O. A. Nevolina

1. GENERAL CHARACTERISTICS OF THE DISCIPLINE «HISTORY AND PHILOSOPHY OF SCIENCE»

Syllabus of the discipline is prepared in accordance with Federal State Educational Standards of Higher Education

Course and degree code of postgraduate programmes *	Name of the course	Details of the order of the Ministry of Education and Science of the Russian Federation on the approval and implementation of the FSES HE	
		Date	Number of the order
01.06.01	Mathematics and Mechanics	30 July 2014.	№ 866 (as amended by Order of the Russian Ministry of Education from 30.04.2015 № 464)
02.06.01	Computer and Information Sciences	30 July 2014.	№ 864 (as amended by Order of the Russian Ministry of Education from 30.04.2015 № 464)
03.06.01	Physics and Astronomy	30 July 2014.	№ 867 (as amended by Order of the Russian Ministry of Education from 30.04.2015 № 464)
04.06.01	Chemistry	30 July 2014.	№ 869 (as amended by Order of the Russian Ministry of Education from 30.04.2015 № 464)
05.06.01	Geosciences	30 July 2014.	№ 870 (as amended by Order of the Russian Ministry of Education from 30.04.2015 № 464)
06.06.01	Biological sciences	30 July 2014.	№ 871 (as amended by Order of the Russian Ministry of Education from 30.04.2015 № 464)
07.06.01	Architecture	30 July 2014.	№ 872 (as amended by Order of the Russian Ministry of Education from 30.04.2015 № 464)
08.06.01	Engineering and construction technology	30 July 2014.	№ 873 (as amended by Order of the Russian Ministry of Education from 30.04.2015 № 464)
09.06.01	Informatics and Computer Engineering	30 July 2014.	№ 875 (as amended by Order of the Russian Ministry of Education from 30.04.2015 № 464)

10.06.01	Information Security	30 July 2014.	№ 874 (as amended by Order of the Russian Ministry of Education from 30.04.2015 № 464)
15.06.01	Mechanical engineering	30 July 2014.	№ 881 (as amended by Order of the Russian Ministry of Education from 30.04.2015 № 464)
18.06.01	Chemical Technology	30 July 2014.	№ 883 (as amended by Order of the Russian Ministry of Education from 30.04.2015 № 464)
20.06.01	Technosphere safety	30 July 2014.	№ 885 (as amended by Order of the Russian Ministry of Education from 30.04.2015 № 464)
21.06.01	Geology, exploration and development of mineral resources	30 July 2014.	№ 886 (as amended by Order of the Russian Ministry of Education from 30.04.2015 № 464)
27.06.01	Management in technical systems	30 July 2014.	№ 892 (as amended by Order of the Russian Ministry of Education from 30.04.2015 № 464)
37.06.01	Psychological sciences	30 July 2014.	№ 897 (as amended by Order of the Russian Ministry of Education from 30.04.2015 № 464)
38.06.01	Economics	30 July 2014.	№ 898 (as amended by Order of the Russian Ministry of Education from 30.04.2015 № 464)
39.06.01	Sociological sciences	30 July 2014.	№ 899 (as amended by Order of the Russian Ministry of Education from 30.04.2015 № 464)
41.06.01	Political and Regional Studies	30 July 2014.	№ 900 (as amended by Order of the Russian Ministry of Education from 30.04.2015 № 464)
42.06.01	Mass media, information and library science	30 July 2014.	№ 901 (as amended by Order of the Russian Ministry of Education from 30.04.2015 № 464)
44.06.01	Education and pedagogic	30 July 2014.	№ 902 (as amended by Order of the Russian Ministry of Education from 30.04.2015 № 464)

			education from 30.04.2015 № 464)
45.06.01	Linguistics and Literature	30 July 2014.	№ 903 (as amended by Order of the Russian Ministry of Education from 30.04.2015 № 464)
46.06.01	Historical sciences and archeology	30 July 2014.	№ 904 (as amended by Order of the Russian Ministry of Education from 30.04.2015 № 464)
47.06.01	Philosophy, Ethics and Religion	30 July 2014.	№ 905 (as amended by Order of the Russian Ministry of Education from 30.04.2015 № 464)
49.06.01	Physical Culture and Sports	30 July 2014.	№ 906 (as amended by Order of the Russian Ministry of Education from 30.04.2015 № 464)
50.06.01	Arts	30 July 2014.	№ 909 (as amended by Order of the Russian Ministry of Education from 30.04.2015 № 464)
51.06.01	Cultural Studies	22 August 2014.	№ 1038 (as amended by Order of the Russian Ministry of Education from 30.04.2015 № 464)

1.1. Discipline summary

Goal of the discipline – study of the discipline is aimed at post-graduate students and applicants assimilation of a particular learning outcome:

- to use the knowledge of modern problems of philosophy and the basic methods of scientific research in professional activity;

and competences:

- ability to work in an interdisciplinary team;
- ability to communicate with experts from other research areas;
- active social mobility, the ability to work in an international environment;
- ability to generate new scientific ideas;
- determination of common forms, laws and tools for groups of disciplines;
- ability to formulate the non-mathematical types of knowledge in a problem-case form;
- in-depth knowledge of modern problems of philosophy, and the ability to offer arguments to justify their solutions;
- ability to formulate specific tasks of scientific research and to carry out their in-depth development;
- systematic knowledge of methods of scientific research, the ability to formulate new goals and achieve new results in the relevant subject area;
- ability to carry out expert work on the profile of certain specialty and to present its results in a form of reports drawn up in accordance with appropriated requirements;
- readiness to carry out scientific research, observing all the principles of academic ethics, and understanding of personal responsibility for the goal, the means and the results of scientific work;

- readiness for practical use of received in-depth knowledge in management decisions;
- ability to practice the skills in the organization of research and design work in the management of collective.

1.2. Expected results of the discipline mastering

The study of discipline is aimed at the mastering of post-graduate learning outcomes represented in the following capacities:

LO-1: ability to carry out research and teaching activities under MPEP HE on the basis of critical analysis and evaluation of the scientific achievements of the past, the ability to generate new ideas.

LO-2: ability to design and implement integrated research and teaching activities under MPEP HE using the knowledge of the history and philosophy of science.

LO-3: ability to design and implement integrated research and teaching activities under MPEP HE with application of modern information and communication technologies.

LO-4: ability to work as a part of Russian or international groups to solve the research, scientific and educational tasks.

As a result of mastering the discipline «History and Philosophy of Science» postgraduate student must:

know: the main stages of the development of national and world philosophy; modern problems of ontology and gnoseology; main stages of the world science development, the stages of the modern type science evolution, the general problems of philosophy of science; philosophical problems of basic subsystems of science.

be able to: to offer and reasonably substantiate solutions of the research problems in the field of philosophy; to formulate new goals and achieve new results in the subject field.

have: the experience in applying the basic methods of scientific research.

As a result of mastering the discipline postgraduate student has the following competences formed:

The graduate, who finishes the post-graduate program, must have the following **universal competencies** (for all courses):

UC-1	ability for critical analysis and evaluation of current scientific achievements, to generate new ideas for solving the research and practical problems, including interdisciplinary fields
UC-2	ability to design and implement integrated research, including multidisciplinary research, on the basis of a holistic system of scientific outlook using the knowledge of the history and philosophy of science
UC-3	willingness to participate in the work of Russian and international research teams to solve scientific and educational tasks

The graduate, who finishes the post-graduate program, must have the following **general professional competencies** (for the following courses – 01.06.01, 02.06.01, 03.06.01, 05.06.01, 06.06.01, 37.06.01, 41.06.01, 42.06.01, 45.06.01, 46.06.01, 47.06.01, 50.06.01):

GPC-1	ability to carry out independent scientific research activity in the relevant professional field using modern methods of research, information and communication technologies
GPC-2	readiness for teaching activity on the basic educational programs of higher education

The graduate, who finishes the post-graduate program, must have the following **general professional competencies** (for the following courses – 04.06.01, 38.06.01):

GPC-1	ability to carry out independent scientific research activity in the relevant professional
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	field using modern methods of research, information and communication technologies
GPC-3	readiness for teaching activity on the basic educational programs of higher education

The graduate, who finishes the post-graduate program, must have the following **general professional competencies** (for the following courses – 07.06.01):

GPC-1	implement the methodology of theoretical and experimental research in the field of architecture
GPC-8	readiness for teaching activity on the basic educational programs of higher education

The graduate, who finishes the post-graduate program, must have the following **general professional competencies** (for the following courses – 08.06.01):

GPC-1	implement the methodology of theoretical and experimental research in the field of constructing
GPC-8	readiness for teaching activity on the basic educational programs of higher education

The graduate, who finishes the post-graduate program, must have the following **general professional competencies** (for the following courses – 09.06.01):

GPC-1	implement the methodology of theoretical and experimental research in the field of professional activity
GPC-8	readiness for teaching activity on the basic educational programs of higher education

The graduate, who finishes the post-graduate program, must have the following **general professional competencies** (for the following courses – 10.06.01):

GPC-2	ability to develop particular research methods and apply them in independent research activities to solve specific research problems in the field of information security
GPC-5	readiness for teaching activity on the basic educational programs of higher education

The graduate, who finishes the post-graduate program, must have the following **general professional competencies** (for the following courses – 15.06.01):

GPC-3	ability to generate and prove with reasons scientific hypotheses
GPC-8	readiness for teaching activity on the basic educational programs of higher education

The graduate, who finishes the post-graduate program, must have the following **general professional competencies** (for the following courses – 18.06.01):

GPC-2	have culture of scientific research in the field of chemical engineering, including the use of new information and communication technologies
GPC-6	readiness for teaching activity on the basic educational programs of higher education

The graduate, who finishes the post-graduate program, must have the following **general professional competencies** (for the following courses – 20.06.01):

GPC-1	implement the methodology of theoretical and experimental research in the field and on the problems of ensuring environmental and industrial safety, monitoring and control of the human environment
GPC-5	readiness for teaching activity on the basic educational programs of higher education

The graduate, who finishes the post-graduate program, must have the following **general professional competencies** (for the following courses – 21.06.01):

GPC-1	ability to plan and carry out experiments, process and analyze the results
GPC-4	readiness for teaching activity on the basic educational programs of higher education

The graduate, who finishes the post-graduate program, must have the following **general professional competencies** (for the following courses – 27.06.01):

GPC-5	be master of the scientific domain of knowledge
GPC-6	readiness for teaching activity on the basic educational programs of higher education

The graduate, who finishes the post-graduate program, must have the following **general professional competencies** (for the following courses – 39.06.01):

GPC-3	be master of the scientific domain of knowledge
GPC-7	ability to learn independently new methods of research and their development, to improve information technologies in the process of professional activity problems solving

The graduate, who finishes the post-graduate program, must have the following **general professional competencies** (for the following courses – 44.06.01):

GPC-2	have culture of scientific research in the field of Pedagogical Sciences, including the use of new information and communication technologies
GPC-8	readiness for teaching activity on the basic educational programs of higher education

The graduate, who finishes the post-graduate program, must have the following **general professional competencies** (for the following courses – 49.06.01):

GPC-3	have culture of scientific research, including the use of new information and communication technologies
GPC-6	readiness for teaching activity on the basic educational programs of higher education

The graduate, who finishes the post-graduate program, must have the following **general professional competencies** (for the following courses – 51.06.01):

GPC-1	implement the methodology of theoretical and experimental research in the field of culture
GPC-2	have culture of scientific research, including the use of new information and communication technologies

GPC-8	readiness for teaching activity on the basic educational programs of higher education
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The graduate, who finishes the post-graduate program, must have the following **professional competencies** (for the following courses – 47.06.01, profile «Ontology and theory of knowledge»):

PC-1	in-depth knowledge of modern concepts of ontology and theory of knowledge, ability to expound them skillfully, to compare and offer both reasoned criticism, and constructive solutions of the problems
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1.3. Schedule of the discipline

Types of academic work, forms of control	Total hours	Academic semesters, number		
		1		
In-class learning	36	36		
Lectures	18	18		
Practical lessons	18	18		
Laboratory works	-	-		
Individual work of students, including all kinds of current attestation	72	72		
Interim attestation	exam	exam		
The total volume under the curriculum, hours		108		
The total volume under the curriculum, credits		3		

2. CONTENT OF THE DISCIPLINE

Code of section, theme	Section, theme Of the discipline*	Content
T1	Theme 1. Substantive grounds of philosophy of science	Philosophy of science and its place in the system of philosophical knowledge. Main aspects of science existence as a subject of philosophy of science: science as a special kind of knowledge and cognitive activity (philosophy of science and epistemology / methodology of science); social existence of science (philosophy of science and sociology of science); science as a cultural phenomenon (philosophy of science and culturology of science). Philosophy of science and history of science. Scientism and anti-scientism as worldview attitudes in philosophy of science. Science in modern world. Science as vocation and profession. Science ethics. Position of science in the knowledge economy and innovation economy
T2	Theme 2. Evolution and basic concepts of philosophy of science	Evolution of philosophy of science. Positivist tradition in philosophy of science: classic positivism, empiriocriticism, logical positivism (neopositivism). Postpositivism: critical rationalism of Karl Popper; methodological "anarchism" of P. Feyerabend. From the logic of science to the history of science: V. I. Vernadskiy, T. Kun. The history of science in the works of V.I. Vernadskogo, E. Gusserlya, M. Fuko and others.
T3	Theme 3. Epistemological problems of philosophy of science	Science and myth, science and religion; science and art; science and commonplace knowledge. Science and pseudoscience. Scientific criteria as a problem: main approaches. Classification of sciences, basic and applied researches: fact, problem, hypothesis, theory, scientific picture of the world; empirical and theoretical levels. The history of scientific method development; experiment as the basis and method of science of the modern type. Scientific truth, correspondence theory; coherence theory (internal consistency); principle of complementary and the idea of pluralism of truth. The nature of scientific knowledge development – evolution or revolution; progress of science and its criteria
T4	Theme 4. Social existence of science	Philosophy of science and sociology of science. Science as a social institution; science and social order; social functions of science, science as a special kind of social activity, the impact of social, political and ideological factors on the idea of scientific criteria. Science in the modern world: convergence of science, engineering and technology; knowledge economy; international nature of science, global and regional scientific community, technology of power-knowledge
T5	Theme 5. Science as a cultural phenomenon	Main approaches to examining dependence / independence of the nature of science from the cultural and historical factors: universalism, eurocentrism, the concept of cultural and historical types of science; O. Shpengler on the cultural and historical implications and variability of forms and styles of knowledge.

		Russian cosmism in science (K. E. Tsiolkovskiy, V.I. Vernadskiy, A.L Chizhevskiy). Features of science as a cultural element; science and technology; science and religion; science and art.
T6	Theme 6. The history of science: a philosophical analysis of the science of the modern type	<p>Classical science of modern times: experiment as the foundation of a new science; classical science's picture of the world; connection of modern european science with technology; characteristics of classical science social existence.</p> <p>Non-classical science: characteristics of the experiment and non-classical science's picture of the world; non-classical science social existence; connection of non-classical science with technology.</p> <p>Post-non-classical science: basic principles of the world picture of post-non-classical science; post-non-classical science and the world of high-tech</p>

3. STUDY TIME ALLOCATION

3.1. Allocation of classroom load and activities of independent work on sections of discipline for all forms of education

Section of the discipline			In-class learning (h.)				Individual work: type, quantity and volume of activities																								
Code of section, theme	Section and theme name	Total for section, theme (h.)	Total for in-class work (h.)	Lectures	Practical lessons	Laboratory works	Total for individual work of students (h.)	Preparation for the in-class learning (h.)					Implementation of individual extracurricular work (quant.)										Preparation for control activities (quant.)			Preparation for attestation activities on the discipline (h.)			Preparation for attestation activities on the module within the discipline (h.)		
								Total	Lecture	Practical, seminar lesson	Laboratory lesson	S/r seminar, seminar-conference, colloquium	Total	Homework *	Graphic work *	Abstract, essay, creative work *	Ind. or a group project *	Translation of foreign literature *	Estimated work, program product development *	Estimated graphic work *	Course paper *	Course project *	Total	Control work *	Colloquium *	Test in the presence of exam	Test in the absence of exam	Exam	Integrated assessment of the results of the module disciplines mastering	Integrated exam on Module	
T1	Theme 1. Substantive grounds of philosophy of science	14	8	8		6	6	6																							
T2	Theme 2. Evolution and basic concepts of philosophy of science	21	10	10		11	8	8													3	1									
T3	Theme 3. Philosophical understanding of science: diversity of approaches	12	6		6		6	6		6																					
T4	Theme 4. Social and cultural existence of science	8	4		4		4	4		4																					
T5	Theme 5. History of science: a philosophical analysis of science of modern type	17	8		8		9	6		6											3	1									
	Total (hour), excluding preparation for attestation activities:	72	36	18	18		36	30	14	16											6	6									
	Total for the discipline (h.):	108	36				72															42					36				

4. PRACTICAL LESSONS ORGANISATION, INDIVIDUAL WORK ON THE DISCIPLINE

4.1. Laboratory works

Not provided.

4.2. Practical lessons

Code of section, theme	Number of lesson	Theme of lesson	Time to conduct the lesson (h.)
T3	1	Philosophical understanding of science: diversity of approaches	6
T4	2	Social and cultural existence of science	4
T5	3	History of science: a philosophical analysis of science of modern type	8
Total:			18

5. RATIO OF SECTIONS OF THE DISCIPLINE AND APPLIED TECHNOLOGIES OF EDUCATION

Code of discipline section, theme	Active learning methods						Distant educational technologies and e-learning					
	Project work	Case Analysis	Business games	Problem learning	Teamwork	Other (please specify)	Network training courses	Virtual workshops and simulators	Webinars and video conferences	Asynchronous web-conferences and seminars	Collaboration and content development	Other (please specify)
S1-2				+	+							
				+	+							

6. EDUCATIONAL, METHODOICAL AND INFORMATION SUPPORT OF THE DISCIPLINE

6.1. Suggested Reading

6.1.1. Main literature

1. Бряник Н. В. История науки доклассического периода: философский анализ: Учебное пособие/ Н.В. Бряник. Екатеринбург : Изд-во Урал. н-та, 2016. 162 с.
2. Бряник Н. В., Томюк О. Н., Стародубцева Е. П., Ламберов Л. Д. История и философия науки: учебное пособие / Общ. ред. Н. В. Бряник, О. Н. Томюк. Екатеринбург: Урал. ун-та, 2014.

6.1.2. Supplemental literature

1. Бернал Дж. Наука в истории общества / пер. с англ. М.: Иностранной литературы, 1956. 340 с.
2. Бряник Н. В. Особенности эксперимента «неклассической науки» // Эпистемология и философия науки. Институт философии Российской Академии наук. М., 2012. Т. XXXI. № 1. С. 108–125.

3. Бряник Н. В. Понятие неклассической науки: толкование и временные рамки // Научный ежегодник Института философии и права Уральского отделения. Российской академии наук. 2011. Вып. 11. С. 187–200.
4. Бряник Н.В. Проблема самобытности русской науки: предпосылки и реальность. Екатеринбург, 1994.
5. Бряник Н. В. Социальный статус и этические проблемы неклассической науки // Научный ежегодник Института философии и права Уральского отделения Российской академии наук. 2013. № 13.
6. Бряник Н. В. Философский анализ неклассической науки: монография. Saarbrücken: Palmarium Academic Publishing, 2014.
7. Бряник Н. В. Философский смысл картины мира неклассической науки // Вопросы философии. 2013. № 1. С. 93–104.
8. Бряник Н. В. Философский смысл картины мира постнеклассической науки // Научный ежегодник Института философии и права УрО РАН. 2014. № 4. С. 5–19.
9. Гайденоко П. П. Эволюция понятия науки (XVII-XVIII вв.): Формирование науч. программ нового времени / отв. ред. И. Д. Рожанский; АН СССР, Ин-т истории естествознания и техники. М.: Наука, 1987. 447 с.
10. Косарева Л. М. Рождение науки Нового времени из духа культуры. М.: Ин-т психологии РАН, 1997. 358 с.
11. Кохановский В. П. Основы философии науки: учебное пособие для аспирантов. Ростов н/Д : Феникс, 2008. 603 с.
12. Общие проблемы философии науки: Словарь для аспирантов и соискателей / сост. и общ. ред. Н. В. Бряник; отв. ред. О.Н. Дьячкова. Екатеринбург: Изд-во Урал. ун-та, 2007. 318 с.
13. Поппер К. Предположения и опровержения. Рост научного знания / пер. с англ. А. Л. Никифорова, Г. А. Новичковой. М.: АСТ: Ермак, 2004. 638 с.
14. Пригожин И., Стенгерс И. Порядок из хаоса: Новый диалог человека с природой / пер. с англ. 4-е изд., стер. М.: Едиториал УРСС, 2003. 310 с.
15. Современная философия науки: Хрестоматия / сост., пер., вступ. ст. и коммент. А. А. Печенкина. М.: Наука, 1994. 252 с.
16. Степин В. С. История и философия науки. М., 2011. Гл. 7. Глобальные научные революции как изменение типа рациональности.
17. Халтурин Ю. Л. Русские позитивисты за медиумическим столом, или Об относительности понятия «псевдонаука» // Эпистемология & философия науки. 2009. Т. XXII. № 4. С. 171–184.
18. Шитиков М. М. Философия техники: Учеб. пособие. Екатеринбург: Изд-во УГТГА, 2004. 99 с.

6.2. Methodical designs

Not provided.

6.3. Software

Not provided.

6.4. Databases, information, reference and search engines

1. <http://terme.ru>
2. <http://www.philosophy.ru>
3. <http://phenomen.ru>
4. <http://filosof.historic.ru>
5. lib.urfu.ru

6.5. Electronic educational resources

Not provided.

7. LOGISTICS OF THE DISCIPLINE

Information about specialized and laboratory equipment of the discipline

For studying the discipline «History and Philosophy of Science» it is recommended to use:

1. Teaching visual aids (tables, diagrams, etc.);
2. Museum exhibits;
3. technical training aids (computer equipment);
4. audiovisual materials - sound films, television, the active use of information technology (programmed tutorials, presentations, and computer slide shows, etc.).

8. FUND OF THE ASSESSMENT RESOURCES FOR CURRENT AND INTERIM ATTESTATION FOR THE DISCIPLINE

8.1. ASSESSMENT RESOURCES FOR CURRENT AND INTERIM ATTESTATION

8.1.1. List of approximate themes for control works:

1. O. Shpengler's conception of cultural and historical forms of science.
2. Social Construction of scientific reality by P. Berger and T. Luckmann.
3. Social order and science by R. Merton.
4. Place of science in the concept of noosphere of V. I. Vernadsky.
5. Science and pseudoscience.
6. Science and ideology.
7. Science and art.
8. Science and religion.
9. Science and everyday life.
10. Science and the world of high technology.
11. Scientism and anti-scientism as an ideological position.
12. Ethics of science.
13. Science and Philosophy.
14. Academies and universities as a form of institutionalization of science: history of formation and development.
15. Scientific school and tradition in science.
16. Scientific community and the internationalization of modern science.
17. Science cities and industrial parks.

8.1.3. List of approximate questions for the exam:

1. Science as an object of philosophy of science; main aspects science existence. Epistemology, sociology of science, culturology of science.
2. Positivistic tradition in philosophy of science and its evolution.
3. Postpositivist conceptions of science (K. Popper, T. Kun).
4. Problem of classification of sciences.
5. Forms of systematization of scientific knowledge (fact, problem, hypothesis, theory, scientific picture of the world).
6. Empirical and theoretical levels of scientific knowledge and their relationship; fundamental and applied researches, and their relationship. Methods of scientific knowledge.
7. Dynamics of science: evolution, revolution, scientific progress and its criteria.
8. Science as a cultural phenomenon. Concept of cultural and historical types of science. Universalism and Eurocentrism.
9. Science in culture system: science and philosophy; science and religion; science and art; science and everyday life. Ethical problems of modern science; scientific ethos.
10. Science as a special kind of social activity. Social functions of science.
11. Classical (modern European) science: criteria and time limits; mechanistic view of the world; characteristics of social and cultural existence; classical science and technology.

12. Non-classical science: criteria and time limits; non-classical science picture of the world; characteristics of social and cultural existence; non-classical science and technology.

13. Post-non-classical science: criteria for selection of the stage; post-non-classical science picture of the world; characteristics of social and cultural existence; post-non-classical science and the world of high-tech.

14. V. I. Vernadskiy: scientific interpretation of science as the highest cultural value, recognition of planetary science missions in the Earth's environment.

15. P. Feyerabend: antiscientific view of the negative impact of science as a sociocultural force.

16. O. Kont about the positive stage in the humanity development, about the criteria of positivity and positive philosophy.

17. E. Makh about psychology of scientific research, ratio of physical and mental, elements of the world and principle of economy of thought.

18. T. Kun as one of the founders of modern sociology of science; the concept of "paradigm - scientific community"; factors of development of science and the nature of scientific revolution.

19. R. Merton: science and social order; institutional status of science; "Ethos of science" and the regulatory standards of the scientific community life.

20. Dzh. Bernal: the birth of modern science and scientific revolution.

21. I. Prigozhin, I. Stengers about the new dialogue between man and nature.