MINISTRY OF EDUCATION OF THE REPUBLIC OF BELARUS
Belarusian National Technical University

Faculty of Management Technologies and Humanization
Department of "Philosophical Teachings"

ELECTRONIC EDUCATIONAL AND METHODOLOGICAL COMPLEX

"PHILOSOPHY"

for specialties of general higher and special higher education

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The electronic educational and methodical complex consists of four sections. The theoretical section presents the materials of the lecture course. The practical section presents a plan of seminar classes and methodological recommendations for guided independent work of students. The knowledge control section offers questions for the exam and test tasks. The auxiliary section presents the curriculum for the discipline “Philosophy”, a list of basic and additional literature.

The complex can be used to organize and control controlled independent work of students.

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TABLE OF CONTENTS

INTRODUCTION

The electronic educational and methodological complex was developed on the basis of a standard program in philosophy, approved by the Ministry of Education of the Republic of Belarus in 2022. The complex includes four sections. It contains lecture material, plans for seminars, curriculum, topics of essays, a list of educational literature for self-training of students.

Philosophy plays an important role in shaping the competencies of the professional activities of specialists in various industries. These competencies include the ethics of business relations and the ethics of professional subordination. Since in any work team there are internal contradictions due to the peculiarities of the nature and temperament of workers, philosophy forms the skills of resolving conflict situations on the basis of dialogue and dialectics. Uncertainty and risks in professional activity are minimized by knowledge of such a section of modern philosophy. Such a section of philosophy as logic plays an important role in making decisions, building arguments, writing a business plan. Logic is used in artificial intelligence technologies. It is relevant for students of the Faculty of Information Technology. For students of this faculty, as well as for students of the Faculty of Architecture and design specialties, technical aesthetics is relevant.

In professional activities, a philosophy of safety is in demand. This is due to the transition of professional activity to the technologies of digital corporate and consumer platforms. Even more important for developers are the questions of the evolution of professional activity in the conditions of the fourth industrial revolution. No matter what professional tasks the activity of a specialist is limited to, it is connected with the subject of political philosophy. The list of categories of this philosophy includes the concepts of global turbulence, sovereignty, and national security.

Such a branch of philosophy as futurology plays an important role in the formation of professional skills of strategic management in the face of a growing number of risks and uncertainty. The terms diversification and import substitution

have become popular. From them follow the features of the application of logic to the tasks of complex logistics. Philosophy plays an important role in the formation of professional skills in scientific and innovative activities. The methodology that forms the skills of search activity is focused on this task.

An important role in the professional activity of a specialist is played by the philosophy of resolving conflict situations. It is especially relevant for heads of organizations, companies and institutions.

I. THEORETICAL SECTION: MATERIALS OF LECTURE COURSE

Section 1. Formation and development of philosophy

Topic 1.1. Philosophy and worldview

1.1.1. The subject of philosophy

In Greek, philosophy means love of wisdom. The term was introduced by the famous ancient mathematician Pythagoras. For two thousand years, the subject of philosophy has been formed. They are the patterns of functioning and development of nature, society and human thinking. Philosophy is distinguished from other sciences by a systematic approach to objective (nature, man, society) and subjective (culture, consciousness) reality.

Like any science, philosophy is structured by fundamental and applied sections. Let us first characterize the fundamental sections. They are collectively referred to as metaphysics. The section in which philosophy reflects the results of the study of its own history is called the "history of philosophy". The section in which philosophy reflects the results of a comparative analysis of the intellectual and spiritual cultures of the East and West is called “philosophical comparative studies”. General issues of being in the forms of matter, space and time, as well as its self-organization and evolution (dialectics and synergetics) are considered in the "ontology" section. Close to this section is the theme of the philosophy of nature, which deals with natural-philosophical research consonant with the topics of modern astronomy, biology, chemistry, physics and ecology,

Philosophical anthropology studies a complex of issues related to man. Visual, cybernetic and digital anthropology have become modern modifications of philosophical anthropology. Visual anthropology studies the role of photography, video information in human life.

Cybernetic anthropology studies the technological possibilities of interfacing the human body, in particular, its brain, with neural interfaces and chips. Such

technological interfacing of a person with special devices is relevant in medicine for restoring movement coordination in people suffering from Alzheimer's disease. Digital anthropology uses sociological and ethnographic methods to study the influence of the digital environment on the individual. For this purpose, the digital trace technique is used. The philosophy of cyborgs also developed.

Philosophical anthropology is close to the philosophy of consciousness, since the human brain has the function of consciousness. The philosophy of mind is closely related to neurophilosophy, neurobiology, neurophysiology and other cognitive sciences that study the connection between thinking and language (cognitive linguistics), the human psyche in the context of cognitive functions (cognitive psychology), and the formal structures of thought (logic). The philosophy of mind is relevant to the theory of artificial intelligence, which is faced with the difficult problem of consciousness.

Man is considered by philosophy not only as an individual and personality, but also as humanity. As a result, a number of issues of social topics are explored by the section "Philosophy of Society". Basically, these are questions related to the structure of society (society), ensuring its sustainable development, taking into account the contradictions that take place in its dynamics. These aspects are studied by the philosophy of conflict, which is closely related to the methodology of management. The digitalization of modern society is studied on the basis of a systematic approach through the analysis of the fourth industrial revolution, industry 4.0, society 5.0, digital generations, new normality and new sociality.

Social reality is in dynamics, so there are a number of issues that are studied by the section "Philosophy of History". Futurology is closely related to this section. The formational and civilizational concepts of the linear development of mankind, as well as the non-linear concept of the historical process, which involves the study of the causes of the death of civilizations, are considered. One of the key topics is scientific and technological progress, as well as the prospects for solving the environmental problems of mankind.

The subject of fundamental philosophy is the problem of cognition. These problems form the content of the section called "epistemology". Along with this term, the terms "epistemology" and "cognitive philosophy" are also used. They represent educational topics. The subject matter of the philosophy of science is close to these sections.

Let us now characterize the applied branches of philosophy. The section "logic" studies the features of human thinking. On the basis of this section, in particular, mathematical logic, computer science and the logic of algebra were formed. They became the basis for the development of Internet technologies. The credit for this belongs to the representatives of analytical philosophy and philosophy of mind. "Ethics" studies morality and morality in the structure of public and individual consciousness of people. It contains a normative part in the form of recommendations on business ethics, etiquette, engineering ethics and software engineering ethics.

"Aesthetics" studies the categories that characterize the aesthetic and design needs of people, which is important in the design of social space, technical devices and technological processes. Good functional design contributes to marketing (sales growth) and the formation of the image of the manufacturer. Aesthetics plays an important role in architecture, landscape design and applied arts.

"Sociology" is an applied modification of social philosophy. It focuses on the study of the social structure of society, social groups and social management. "Political Science" is an applied modification of social philosophy. It studies the features of the formation and functioning of such an institution of society as the state and related forms of political dialogue and political representation in public authorities.

"Philosophy of Law", as an applied modification of social philosophy, studies the features of legal consciousness, law-making and the application of law in the social tradition. "Economic Philosophy" studies the impact of economic determinism on society. The features of the economic activity of mankind in different

civilizations and formations are taken into account, which is relevant in the context of accelerating social dynamics.

Since man does not live by bread alone, the applied section "Philosophy of Religion" studies the role of national and world religions in social dynamics and the evolution of society. These are important issues of religious tolerance and tolerance. At the same time, state law clearly stipulates the norms within which the activities of religious organizations should be carried out.

The Philosophy of Technology looks at the growing role of technology in today's society and examines the risks associated with this growing role. The methodological part of the philosophy of technology is focused on the development of effective methods of search and management activities. A striking example of such a technique was the brainstorming technique.

The methodology of scientific research is focused on the reconstruction of the main stages and components that accompany the writing of term papers, graduation projects, master's and candidate's dissertations.

Thus, philosophy performs a number of applied functions. It is integrated into the structure of the professional activity of a modern specialist. In this context, the philosophy of resolving conflict situations in the system of corporate relations plays an important role.

1.1.2. Philosophy and worldview

Philosophy, unlike other sciences, studies not only a specific subject area, but also how people think in the social space of civilization, state, economy and culture. This is a question about how they find ways of dialogue and understanding between cultures. The content of the public consciousness of the citizens of civilization and the state is designated as a worldview. It has general and individual historical features. The general features of communication are actively shaping the digital technologies that have created the social networking environment.

The historical features of the content of the worldview of people of different cultures and civilizations formed such forms of social consciousness as mythology

and religion. Mythology has historically formed in the public mind as a special institution for conducting a dialogue between a person and the outside world. To facilitate the dialogue with natural phenomena and spiritual forces, the practices of endowing the elements with humanoid forms were used. Hybrid forms of conjugation of the human body with the forms of the bodies of creatures of natural and artistic design were also used.

They are presented by texts of a certain subject. The most famous are the myths created by ancient mythology. After the transition of the worldview of mankind to the substantive foundations of religion in the forms of polytheism (polytheism) and monotheism (monotheism), mythology lost its influence and transformed into such forms of culture as epic, legend, fairy tale, legend. Plots taken from ancient myths are actively filmed. Gradually, the institution of religion began to play the main role in traditional societies. It focuses not only on the dialogue of a person with external natural forces, but also on the problems of the inner world of the person himself. At the initial historical stage of religion, represented by polytheism, the dialogue of man with external natural forces dominated.

These forces and elements were endowed with the appearance of a person and his way of life. But the gods lived separately from people. In ancient Greece, it was Mount Olympus. There were mediators between gods and people. They were called titans. One of the gods - Hermes conveyed the messages of the gods to people. Subsequently, this practice of dialogue became known as hermeneutics.

Polytheism was also historically characteristic of the culture of Belarus. Natural elements had specific names, and the dialogue of the local population with them was carried out through special sanctuaries. Most of all, people were worried about issues related to the harvest, the change of seasons and relations with ancestors. But the interests of a person were increasingly focused on their own inner world and questions that could only be answered by a single God or, as in Buddhism, a special spiritual teaching about the universe and ways for a person to achieve peace of mind.

The population of the Mediterranean chose the path of monotheism. Within the framework of this new historical modification, each person had the opportunity to conduct a dialogue with the creator of the world and himself. The ascent to Golgotha and the resurrection of Christ from the dead testified to the disposition of God towards the fate of man. Thus, a new chronology began in the Christian world, which many countries, including Belarus, adhere to this day. Christianity was adopted by the population of Belarus in the 10th century. It is confessed by Eastern and Western rites.

Seven hundred years after the emergence of Christianity in the Arabian Peninsula, the formation of such a world religion as Islam began. This religion is monotheistic. It spread through the Arab Caliphate and in India. This religion retains its influence in many countries of the world today. Christianity (more than 2 billion believers), Islam (about 2 billion believers) and Buddhism (about one billion believers) have a particularly great influence on the worldview of mankind. Influential in terms of the number of believers is Hinduism.

In addition to the religious component, the worldview of the population of many states contains secular components. Whatever differences accompany the worldview of people on the planet there are common components in its structure. They are represented by values, traditions, ideals, needs, ideas. And also - interests, norms, mentality, identity, archetypes. Values are the subject of study of axiology. Values reflect in the worldview the significance of someone or something for people. Since different spheres of life and the people themselves are significant for people, they distinguish material, artistic and spiritual values, as well as a value attitude towards friends, loved ones, parents, native places and the country, the natural and social environment.

The manifestations of the value attitude are value perception and value representation. From the value attitude follows the assessment of people and the products of their creativity and activities. Professional assessment is called expertise. It is used when receiving objects, identifying original works of art.

Values that are passed down from generation to generation are called traditions. At the initial stages of human history, the status of values was not questioned, so civilizations on the planet were traditional. In industrial civilizations, the status of traditions is not so stable. There are supporters of the traditional way of life, faith, holidays, family. These are conservatives and neoconservatives.

But there are those who oppose tradition. They are called nihilists and marginal. Nihilists are belligerent and destroy traditional values. Nihilism has become widespread in the Western world, undermining the values of the traditional family and marriage.

Ideals play an important role in the worldview of people. These are standards that reflect ideas about the state, the family, the beautiful and the sublime, the economy, happiness, fashion (the ideal of high fashion). In relation to engineering activities, the ideal is a perpetual motion machine. Individuals may be regarded by others as ideals, as role models in their personal lives.

At the level of individual consciousness there is an I-ideal. Ideals can be so disproportionate to the capabilities of the individual that this disproportion can lead the person to internal crises. Folk wisdom in this case says that a bird in the hands is better than an eagle in the sky.

Needs in the worldview reflect the ratio of primary and secondary intentions (motives) of the individual. Primary needs are formed by the physiological characteristics of the human body (eat, drink, dress, have their own family). Secondary needs are updated when the primary needs are satisfied. These are the needs of self-actualization in communication, professional activity. One of the models of human needs was developed by A. Maslow. It is associated with the concept of the pyramid of needs.

Ideas are born in the worldview of people under the influence of values, traditions, ideals and needs. They have a creative (heuristic), political and economic specialization. The idea contains a strategy and action plan to achieve specific goals and includes a description of how to achieve these goals. In political science, there is such a section as “the ideology of the Belarusian statehood”. This section

reveals the constructive role of the state ideology in various spheres of life of the Belarusian society.

Interests reflect the direction of the individual and social outlook on specific areas of society. In this context, economic and political interests are distinguished. Part of the interests belongs to the category of creative hobbies and hobbies with which they fill their free time.

Norms in the worldview perform the regulatory function of self-organization and self-control of the individual. If an individual wants to use all the possibilities of a social space, then he must comply with the legal and moral traditions characteristic of this space, as well as technical norms. Otherwise, he will limit his possibilities himself. So, violation of the rules of the road can deprive you of the right to drive. By illegal activity, an individual will limit his personal freedom. Norms play an important role in the professional activities of civil and industrial engineers, as well as economists. This is a whole area of metrology associated with standardization and certification, as well as diagnostics of technical systems and devices.

In the field of management (management), quality management systems (QMS) are actively used. The term "mentality" in the content of the worldview denotes the features of the national psychology and thinking of the nation (territorial community of people within the state). The key features of the mentality of the Belarusian nation include tolerance, peacefulness and diligence love for the native nature. Identity reflects the degree of stability of the worldview of the individual and society to possible changes formed by external factors of information impact, migration and military threat. By the criterion of military threat Belarusians have been tested by history for many centuries.

At the same time, they retain their national identity and have developed ways to counter military threats. One of these methods was the mass partisan and underground movement during the Great Patriotic War. This partisan and underground movement was directed against the German invaders, who carried out the genocide of the Belarusian people.

Archetypes constitute the cumulative resource of traditions. This resource is stored in the worldview of people and manifests itself in special forms of dialogue, temperament, and character. Archetypes became the subject of study by K.G. Cabin boy. In the structure of the worldview of people, the levels of attitude, worldview and world development are distinguished. The worldview of people is characterized by pragmatism. This means that people transform information and knowledge into actions that contribute to the realization of their ideas about life in a particular community.

In the structure of the worldview, an important role is played by the features of the psychological make-up (character, temperament, emotions, feelings, memory, mentality), as well as ideological components in the form of the ideology of the Belarusian statehood. This means that people think in terms of national interests, which are implemented by their nation-state.

Among these national interests are ensuring sovereignty, favorable conditions for national producers, and good neighborly relations with states. For the population of the Republic of Belarus, this is a priority, since the country was the battlefield of two world wars only in the 20th century.

The armies of different European states invaded the territory of Belarus. Moreover, the German invaders in 1941-1944 carried out the genocide of the Belarusian people. German invaders burned thousands of Belarusian villages. Many civilians died in concentration camps. In the context of global turbulence in the first half of the 21st century, the Republic of Belarus, through the symbolism of 2023, as the Year of Peace and Creation, calls on humanity to change the practices of modern geopolitics towards dialogue and peaceful negotiations.

In terms of content, the worldview of individuals cannot be mechanically summed up, since each individual is formed according to a separate social program, in which factors of family, school, temperament, character, religion, secular lifestyle and historical memory play an important role. It is important to take into account age and gender characteristics, as well as the impact of social networks on modern digital generations. Traditionally, mankind has been socialized by the cul-

tures of the East and West. Therefore, it is important to consider the features of these philosophical cultures.

Topic 1.2. Genesis of philosophical knowledge. The main directions of philosophy

1.2.1. Philosophy of the Ancient East

The ancient East is geographically divided into the Near, Middle, and Far East. The reference point for the proximity category is Europe and the Mediterranean region. In the period of antiquity and the Middle Ages, the Near and Middle East were territorially included in the zones of state influence of the empire of Alexander the Great and the Roman Empire, the eastern part of which, under the name of the Roman (Byzantine) Empire, existed until 1453.

The philosophy of Aristotle had a special influence on the regions of the Near and Middle East. Under its influence was the Arabic-speaking philosophy, which was part of Islam. The ideas of Aristotle were used by Al-Farabi, Al-Kindi, Al-Biruni, O. Khayyam, Avicenna (Ibn-Sino).

Arabic-speaking philosophy was developed by people from Azerbaijan, Iran, southern Spain (Cordoba Caliphate). Also, Kazakhstan, Syria, Tajikistan, Uzbekistan. The distribution of philosophy was facilitated by the logistics of the Great Silk Road, in which Arab merchants played the main role. Thanks to China's trade with the Roman Empire, such cities as Alexandria, Baghdad, Bukhara, Damascus, Constantinople, Samarkand, Urgench, and Khiva reached architectural and cultural flourishing. Marco Polo, who spent many years in China (Far East) and knew the logistics of the Great Silk Road, told the Europeans about the peculiarities of Rome's trade with China.

On the territory of Europe there were three trade logistics hubs of the Great Silk Road with a corresponding branching in the northern direction. One hub was located on the territory of the Byzantine Empire in Constantinople. He regulated trade and cultural contacts through Ancient Rus' with Scandinavia (the path from

the Varangians to the Greeks). The second hub was in Italy (Venice, Genoa, Florence). He formed trade routes in Central Europe.

The third hub was located in the southern part of the Iberian Peninsula. He formed trade routes to Western Europe. The routes of the Silk Road have become routes for the dissemination of the achievements of ancient culture, science and philosophy in Asia, Europe and North Africa.

At the end of the 20th century, the PRC initiated an economic program to revive the logistics of the Silk Road in the new historical conditions of globalization. In the oases of Fergana, Bukhara, Samarkand, Khiva, Al-Farabi, Al-Biruni, Ulugbek, Ibn-Sina, O. Khayyam were formed. They carried out the synthesis of the ancient philosophy of Aristotle with rational Islam. In this system of intellectual convergence, cultural oases on the territory of Kazakhstan played an important role. These are the cities of Otrar, Taraz, Syganak, Turkestan, Merkez.

Al-Farabi considered the concept of reason, substantiated the need for the art of chemistry, outlined the classification of sciences, which included the science of language, logic and its subsections, mathematics (arithmetic, geometry, optics, astronomy, music, the science of gravity and skillful techniques), physics and metaphysics, civil sciences, jurisprudence and dogmatic theology.

In creating conditions for access to the ancient heritage of the inhabitants of the Caliphate, an important role was played by translations into Arabic of texts from Greek, Syriac, Farsi, and Hindi. Among the translators were Hunayn ibn Ishaq, Ishaq ibn Hunayn, Khubaish Sabit ibn Kura, Yahya ibn Adi, Ishaq ad-Dimishki, Noubakht, ibn Mukaffa, ibn Manka, ibn Vakhshia.

1.2.2. Philosophical tradition of the India

Indian Philosophy (or, in Sanskrit, Darshanas), refers to any of several traditions of philosophical thought that originated in the Indian subcontinent, including Hindu philosophy, Buddhist philosophy, and Jain philosophy. It is considered by Indian thinkers to be a practical discipline, and its goal should always be to improve human life. The main Hindu orthodox (astika) schools of Indian philosophy are those codified during the medieval period of Brahmanic-Sanskritic scholasti-

cism, and they take the ancient Vedas (the oldest sacred texts of Hinduism) as their source and scriptural authority.

Samkhya is the oldest of the orthodox philosophical systems, and it postulates that everything in reality stems from purusha (self or soul or mind) and prakriti (matter, creative agency and energy). It is a dualist philosophy, although between the self and matter rather than between mind and body as in the Western dualist tradition, and liberation occurs with the realization that the soul and the dispositions of matter (steadiness, activity and dullness) are different.

The Yoga school, as expounded by Patanjali in his 2nd Century B.C. Yoga Sutras, accepts the Samkhya psychology and metaphysics, but is more theistic, with the addition of a divine entity to Samkhya's twenty-five elements of reality. The relatively brief Yoga Sutras are divided into eight ashtanga (limbs), reminiscent of Buddhism's Noble Eightfold Path, the goal being to quiet one's mind and achieve kaivalya (solitariness or detachment).

The Nyaya is based on the Nyaya Sutras, written by Aksapada Gautama in the 2nd Century B.C. Its methodology is based on a system of logic that has subsequently been adopted by the majority of the Indian schools, in much the same way as Aristotelian logic has influenced Western philosophy. Its followers believe that obtaining valid knowledge (the four sources of which are perception, inference, comparison and testimony) is the only way to gain release from suffering. Nyaya developed several criteria by which the knowledge thus obtained was to be considered valid or invalid (equivalent in some ways to Western analytic philosophy).

The Vedanta, or Uttara Mimamsa, school concentrates on the philosophical teachings of the Upanishads (mystic or spiritual contemplations within the Vedas), rather than the Brahmanas (instructions for ritual and sacrifice). Due to the rather cryptic and poetic nature of the Vedanta sutras, the school separated into six subschools, each interpreting the texts in its own way and producing its own series of sub-commentaries: Advaita (the best-known, which holds that the soul and Brahman are one and the same), Visishtadvaita (which teaches that the Supreme Being has a definite form, name – Vishnu – and attributes), Dvaita (which espouses a be-

lief in three separate realities: Vishnu, and eternal soul and matter), Dvaitadvaita(which holds that Brahman exists independently, while soul and matter are dependent), Shuddhadvaita (which believes that Krishna is the absolute form of Brahman) and Acintya Bheda Abheda (which combines monism and dualism by stating that the soul is both distinct and non-distinct from Krishna, or God).

The main heterodox (nastika) schools, which do not accept the authority of the Vedas, include: Also known as Lokayata, Carvaka is a materialistic, sceptical and atheistic school of thought. Its founder was Carvaka, author of the Barhaspatya Sutras in the final centuries B.C., although the original texts have been lost and our understanding of them is based largely on criticism of the ideas by other schools. As early as the 5th Century, Saddanitiand Buddhaghosa connected the Lokayatas with the Vitandas (or Sophists), and the term Carvaka was first recorded in the 7th Century by the philosopher Purandara, and in the 8th Century by Kamalasila and Haribhadra. As a vital philosophical school, Carvara appears to have died out some time in the 15th Century.

Buddhism is a religion, a practical philosophy and arguably a psychology, focusing on the teachings of Buddha (Siddhartha Gautama), who lived in India from the mid-6th to the early 5th Century B.C. It was introduced to China from India, probably during the 1st Century B.C. Chinese tradition focuses on ethics rather than metaphysics, and it developed several schools distinct from the originating Indian schools, and in the process integrated the ideas of Confucianism, Taoism and other indigenous philosophical systems into itself. The most prominent Chinese Buddhist schools are Sanlun, Tiantai, Huayan and Chán (known as Zen in Japan). Buddismis a non-theistic system of beliefs based on the teachings of Siddhartha Gautama, an Indian prince later known as the Buddha, in the 5th Century B.C.

The question of God is largely irrelevant in Buddhism, and it is mainly founded on the rejection of certain orthodox Hindu philosophical concepts (althought it does share some philosophical views with Hinduism, such as belief in karma). Buddhism advocates a Noble Eightfold Path to end suffering, and its philosophical principles are known as the Four Noble Truths (the Nature of Suffering,

the Origin of Suffering, the Cessation of Suffering, and the Path Leading to the Cessation of Suffering). Buddhist philosophy deals extensively with problems in metaphysics, phenomenology, ethics and epistemology.

The central tenets of Jain philosophy were established by Mahavira in the 6th Century B.C., although Jainism as a religion is much older. A basic principle is anekantavada, the idea that reality is perceived differently from different points of view, and that no single point of view is completely true (similar to the Western philosophical doctrine of Subjectivism). According to Jainism, only Kevalis, those who have infinite knowledge, can know the true answer, and that all others would only know a part of the answer. It stresses spiritual independence and the equality of all life, with particular emphasis on non-violence, and posits self-control as vital for attaining the realization of the soul's true nature.

The Arthashastra, attributed to the Mauryan minister Chanakya in the 4th Century B.C., is one of the earliest Indian texts devoted to political philosophy, and it discusses ideas of statecraft and economic policy. During the Indian struggle for independence in the early 20th Century, Mahatma Gandhi popularized the philosophies of ahimsa (non-violence) and satyagraha (non-violent resistance), which were influenced by the teachings of the Hindu Bhagavad Gita, as well as Jesus, Tolstoy, Thoreau and Ruskin.

1.2.3. Philosophical tradition of the China

Chinese Philosophy refers to any of several schools of philosophical thought in the Chinese tradition, including Confucianism, Taoism, Legalism, Buddhism and Mohism. It has a long history of several thousand years. In about 500 B.C., the classic period of Chinese philosophy (known as the Contention of a Hundred Schools of Thought) flourished, and the four most influential schools (Confucianism, Daoism, Mohism and Legalism) were established. During the Qin Dynasty (also know as the Imperial Era), after the unification of China in 221 B.C., Legalism became ascendant at the expense of the Mohist and Confucianist schools, although the Han Dynasty (206 B.C. – A.D. 220) adopted Taoism and later Confu-

cianism as official doctrine. Along with the gradual parallel introduction of Buddhism, these two schools have remained the determining forces of Chinese thought up until the 20th Century.

Neo-Confucianism (a variant of Confucianism, incorporating elements of Buddhism, Taoism and Legalism) was introduced during the Song Dynasty (A.D. 960 – 1279) and popularized during the Ming Dynasty (1368 – 1644). During the Industrial and Modern Ages, Chinese philosophy also began to integrate concepts of Western philosophy. Sun Yat-Sen (1866 – 1925) attempted to incorporate elements of democracy, republicanism and industrialism at the beginning of the 20th century, while Mao Zedong (1893 – 1976) later added Marxism and other.

Daoism. Sometimes also written Daoism, Taoism is a philosophy which later also developed into a religion. Tao literally means "path" or "way", athough it more often used as a meta-physical term that describes the flow of the universe, or the force behind the natural order. The Three Jewels of the Tao are compassion, moderation, and humility. Taoist thought focuses on wu wei ("non-action"), spontaneity, humanism, relativism, emptiness and the strength of softness (or flexibility). Nature and ancestor spirits are common in popular Taoism, although typically there is also a pantheon of gods, often headed by the Jade Emperor.

The most influential Taoist text is the "Tao Te Ching" (or "Daodejing") written around the 6th Century B.C. by Lao Tzu (or Laozi), and a secondary text is the 4th Century B.C. "Zhuangzi", named after its author. The Yin and Yang symbol is important in Taoist symbology (as in Confucianism), as are the Eight Trigrams, and a zigzag with seven stars which represents the Big Dipper star constellation.

Legalism is a pragmatic political philosophy, whose main motto is "set clear strict laws, or deliver harsh punishment", and its essential principle is one of jurisprudence. According to Legalism, a ruler should govern his subjects accordoing to Fa (law or principle), Shu (method, tactic, art, or statecraft) and Shi (legitimacy, power, or charisma). Under Li Si in the 3rd century B.C., a form of Legalism essentially became a totalitarian ideology in China, which in part led to its subsequent decline.

Mohism was founded by Mozi (c. 470 – 390 B.C.) It promotes universal love with the aim of mutual benefit such that everyone must love each other equally and impartially to avoid conflict and war. Mozi was strongly against Confucian ritual, instead emphasizing pragmatic survival through farming, fortification and statecraft. In some ways, his philosophy parallels Western utilitarianism. Although popular during the latter part of the Zhou Dynasty, many Mohist texts were destroyed during the succeeding Qin Dynasty, and it was finally supplanted completely by Confucianism during the Han Dynasty.

1.2.4. Ancient philosophy

The Greeks at the time of Socrates and Plato were undergoing a major change in the way in which they would think about the world, themselves and reality itself. Greek culture rose to great heights in the period from 525 BC to 350 BC, the period that brackets the lifespan of Socrates and Plato. In this period Athens, the Greek city-state, would rise to the height of its political and military powers and would come to represent the height of Greek cultural achievement as well. The Greeks during this time, and particularly in Athens, were moving from an oral to a literate culture and from a foundation of religious belief and mythology to another based upon the inventions and creations of artistic endeavor and rational thought.

The Greeks, prior to Plato, had a culture (the way a people learn to think, feel and act from the previous generation) that was transmitted orally. Few could read or write. There was little material to write upon. Papyrus from Egypt would be arriving and be popularized after Socrates death. If the average Greek were to learn about anything it would need to be through hearing whatever it was spoken about. What they heard they made every effort to remember and then repeat. This pattern for transmitting information became a pattern for life itself.

The periods of Ancient philosophy 1.The period of natural philosophy or pre-socraticperiod. (From Thales to Democritus). What is the beginning of everything? 2. Classical period. (Sophists, Socrates, Plato, Aristotle). What is the man? 3. Hellenistic philosophy. (Skepticism: Pyrrho, Sextus Empiricus; Cynicism: An-

tisthenes, Diogenes of Sinope, Crates of Thebes (taught Zeno of Citium, founder of Stoicism; Stoicism: Zeno of Citium, Cleanthes, Chrysippus, Crates of Mallus; Epicureanism: Epicurus (Greek) and Lucretius (Roman). What is good? What is justice? What is meaning of life?

Pre-socratics. In the works of the pre-socratics there is obviously the progression from mythopoetic thought to a primitive scientific thinking in the form of speculative inquiry and from that form of thought to philosophy ass rational inquiry. These thinker were searching for the ARCHE or the very first or most fundamental principles or causes. They wondered about the immanent and lasting ground for existence. They were critical of the cosmogony they had in the mythopoetic tales. They were looking for a cosmology (an explanation for the order of the universe) that did not rely on the gods.

They did not base their thinking on belief but on reason. These thinkers were naturalists and materialists as they sought answers to physical questions that were rooted in the physical itself. They were looking for the stuff out of which the universe was composed and they wanted an answer that was itself made of the same stuff. The matter of the universe would have its explanation in matter. They were, for the most part, materialists, rejecting spiritual or religious explanations for the causes and stuff of the universe.

Thales 625-545 BC was looking for the basic stuff (physis) out of which all else is made. He expressed his idea concerning the basic stuff in his claim that “All things are made of WATER”! Thales claim is most likely the claim that there is “Unity in Difference”! In other words, Thales was attempting to claim that there was some basic stuff out of which all things are made. He selects water perhaps because it has properties which enable all the people of his time and our time to experience water in three different states: Liquid, solid and gas.

Now if one thing such as water can exist in three very different forms then there must be something , like water, that is the basic stuff, physis, of the universe. Today, scientists make a similar claim. All reality, all that exists in the universe is made of or composed of or manifests as: energy. So from Thales comes the idea

that no matter how things may appear, all things are made up of the same stuff: Everything is one thing!

Anaximander (ca. 612-545 BC) rejected Thales basic stuff, water, and speculated that the ultimate reality could not be identified with any one particular element. He came up with the basic stuff being the BOUNDLESS or the INFINITE or the UNLIMITED. This basic stuff was infinite and without a beginning. He also conceived of the theory of species evolving from one another through time in response to the need to adapt. He thought of the earth as revolving. He speculated that all life originated in the sea and moved onto the land. With this thinker abstraction and materialism developed further.

Anaximenes (585-528 BC) hypothesized that it was not water but AIR that was the fundamental stuff of the universe and that air can be condensed or rarefied to take on the properties of what appear to be other elements. He sought to simplify and clarify the model of the universe.

Anaxagoras (500-428 BC) appears to have taught that all that is can be explained with a combination of NOUS and MATTER. For him the universe of matter was set into its form and motions by Nous or MIND. This mind is immortal, homogeneous, omnipotent, omniscient and orders all phenomena. He did not believe in gods and goddesses. He did not think that the sun was a god and the moon a goddess. He thought the sun was a ball of fire and the moon a rock which reflected light from the sun. He was to be executed for blasphemy by the

Athenians but escaped to another land. Socrates was interested in his theories until Socrates learned that for Anaxagoras the NOUS acted at the beginning of the universe, setting all in motion, and was not invoked by Anaxagoras to explain motions including those of humans. Socrates was to focus on the actions of humans and believed that their minds had a great deal to do with their actions.

Empedocles (450BC) conjectured that there are four basic elements: EARTH, AIR, FIRE and WATER. They were moved about by the two basic forces: LOVE and STRIFE. Together these ideas explained everything that was physical.

Pythagoras (580-496 BC) not only quests after the basic stuff of the universe but his works reveal that he explored truth itself and the idea of the good life; questions of ethics. He was concerned with the nature of reality and of life. He developed spiritualism in contrast to the materialist schools of his time.He was a mathematician, spiritualist, mystic, musician and leader of a cult.

His fundamental contribution to the world of thought was that the world is really not material at all but made up of NUMBERS. Numbers are things and in some way constitute the essence of reality. All things are, despite appearances, made up of numbers. The original number the ONE being as with fire, is in motion and set all else into being.

Heraclitus (535-475BC) believed that all things are in perpetual flux. BECOMING is the basis for all that is real. BEING is unreal.

All is changing. Permanence is an illusion. All things are one and one-in-many. That which is the essence of all is FIRE. The LOGOS is the universal principle of reason through which there is a law like process in the universe that provides its existence and order.

Parmenides (540-470 BC) is has always been and always will be. Reality is that which never changes. Reality is BEING and not becoming. Changelessness is the nature of all reality. This is not at all obvious to our senses. Parmenides trusted in his reason over his senses. The appearance of things can be deceiving, so trust in reason. All change is illusion for Parmenides! The truth is what is arrived at by thought and the truth is set over and against opinions based upon sense impressions and common beliefs. The REAL is changeless.

The Sophists were orators, public speakers, mouths for hire in an oral culture. They were gifted with speech. They were skilled in what becomes known as Rhetoric. They were respected, feared and hated. They had a gift and used it in a manner that aroused the ire of many. They challenged, questioned and did not care to arrive at the very best answers.

They cared about winning public speaking contests, debates, and lawsuits and in charging fees to teach others how to do as they did. To be able to speak well

meant a great deal at that time. As there was no real paper available, there were no written contracts or deeds and disputes that would be settled today with a set of documents as evidence back then they would need to be settled through a contest of words: one person's words against another's. Whoever presented the best oral case would often prevail. To speak well was very important.

The Sophists were very good speakers. Indeed, they had reputations for being able to convince a crowd that up was down, that day was night, that the wrong answer could be the right answer, that good was bad and bad is good, even that injustice is justice and justice would be made to appear as injustice! To support one's position in any matter, nothing better could be offered than a quotation from one of the works, which told of the gods and their actions.

If an action of the gods could be found that was similar top that being taken by a party to a debate then that was evidence of the correctness of that action. Therefore, those who were the fastest and most accurate at being able to locate quotations and take them and apply them to a given situation would often win the debate, the contest, the lawsuit or discussion.

Some excerpts of Sophists Protagoras Man is the measure of all things. There is relative truth only. Everyone has his own truth. Gorgias Nothing exists. If something does exist we can not know it. Even if we can know it we not communicate it. Callicles Might is right and accident and not fate nor the gods or destiny makes might. Thrasymachus Might makes right.

Socrates (469-399 BC) was born in Athens and spent almost all his days there. His father was a sculptor, and Socrates may have been employed on the stone-work of the Acropolis. He claimed that his mother was a midwife. The education of Socrates was primarily informal, but it was said that he heard Zeno, Parmenides, Prodicus, Aspasia, Anaxagoras, Damon, and Archelaus.

Diogenes Laertius gives Socrates credit for having improved the study of ethics so much that he was considered its inventor. Socrates himself was always eager to discuss philosophical questions with others, but he said that he never accepted money for teaching. Some thought he might have helped Euripides with his

plays. Socrates spent most of his time in public talking with anyone willing to discuss philosophy.Socrates never traveled far from Athens except on military expeditions during the Peloponnesian Wars against Sparta.

Socrates tried to avoid politics, because he thought it was too dangerous for a lover of truth and justice. At the age of 70 Socrates was brought to trial for not believing in the state religion and for corrupting the youth. The story of his trial, imprisonment, and execution are told in the *Defense of Socrates*, *Crito*, and *Phaedo* by Plato. Xenophon also wrote about Socrates and tells us that when Hermogenes urged Socrates to prepare his defense, Socrates replied that whenever he started to do that, his divine sign prevented him. This divine sign is also mentioned by Plato as a spirit that would warn Socrates not to do various things.

Socrates led talks and discussions with students and opponents.Socrates first made the subject of analysis of the concept, not reality itself.The Socratic method ("maieutic") is a skilful guidance of questions in order to achieve the responses which help the truth is born. One of the main philosophical problems of Socrates is self-knowledge ("Know yourself").

Plato (428-348 BC) was from an aristocratic family, and some of his mother's relatives were good friends of Socrates. Plato was one of the young men who liked to listen to the conversation of Socrates. After the execution of Socrates, Plato and some others went to Megara with Euclides, the founder of the Megarian school of philosophy. Plato then traveled extensively in Greece, Egypt, and Italy. When he was about forty Plato founded the Academy where he taught for nearly forty years. In his sixties Plato made two visits to Syracuse in Sicily to try to advise King Dionysus II, but these proved rather unsuccessful.

Aristotle studied and taught at Plato's Academy for twenty years but left shortly after Plato died. Many dialogs and a few letters of Plato's writings remain. Socrates is featured as a main speaker in many of the dialogs. Scholars may argue whether the ideas presented are those of Socrates or Plato, but in the final analysis what may be important is what truth the reader might find in them and what enlightenment can be gained from studying the intellectual process.

Aristotle deservedly called “The philosopher” by Thomas Aquinas stands at the epitome of ancient Greek philosophy. He was a polymath and made contributions to various scientific fields like logic, ethics, politics, mathematics, theater, medicine etc. Even these classifications of various sciences was made by him.

He was born in Macedonia in 384 BCE and came to Plato’s academy he was 18 years of age. He was most interested in study of nature and this can described as his philosophical project. Aristotle supposedly produced over 170 titles over which 47 are preserved. The titles that are preserved are largely lecture notes and hence they do not demonstrate his prose style which was admired by many of his followers. It is quite interesting to note that even though Aristotle spent around 20 years in Plato’s academy his thought is quite different from his teacher’s. Aristotle believed that Plato had a mythical world picture and that he confused human imagination with the real world.

Ideas and forms Aristotle, unlike Plato believed that there were no innate ideas. For him, ideas and forms had no existence of their own. They are developed by humans through seeing and experiencing a certain number of objects that consist of those ideas and forms. They are the characteristics of the things being observed. They are, just as inseparable from the object as body and soul. Thus Aristotle rejected Plato’s thought that the idea or form of the object came before the object itself. Aristotle laid importance to sensory perceptions. For him reason (which according to Plato was more important) was empty until something has been sensed. He agreed with Plato that reason is innate but still nothing could exist in consciousness unit it has first been experienced through the senses. Thus, again, according to Aristotle, humans have no innate ideas.

Nature’s Scale. Aristotle was interested in the changes in nature. So, Aristotle categorized nature. His criterion of dividing natural things is based on the object’s characteristics or in other words what the object does and can do. He divided natural world into two main categories: living and non-living. For this he discussed the “form” and “potentiality” of the objects. Nonliving things such as stones, wood, water, soil had no potentiality for change.

This means that they cannot change themselves and have to be influenced externally. Living beings on the other hand have the potentiality for change.Aristotle subdivides living things into two categories – plants and living creatures that are not plants. All the living things (plants, animals and humans) absorb nourishment to grow and to propagate. Animals and humans have an advantage over plants due to the fact that they can perceive and experience the world. Also, they can move around. Humans further take an edge over animals and plants through their ability to think rationally.

Causality Aristotle discussed causality by referring to the cause of the phenomenon or object and the purpose behind it. He held the opinion that there are different types of cause in nature and in the end he classified them in four categories – the material cause, the efficient cause, the formal cause and finally the purpose. If we discuss the "causes" of rain here is how Aristotle would classify them.

Cooling of moisture' is the efficient cause. The formal cause is that the nature of water droplets is to fall to the earth. And finally the "purpose" is this – it rains because living things (plants and animals) need rain in order to sustain and grow themselves. Aristotle's views on causality can be critcised as it is against the nature of scientific reasoning of today. What this reasoning says unlike Aristotle's opinion is that, because it rains, we are existing and thus are able to ask this question. However still, there are many communities who believe in a "higher" power or God and whose explanation seem to similar to Aristotle's. However, what they are talking about is God's purpose and not the actual purpose or cause of the object in itself.

Logic It is self-evident from the concepts discussed above that Aristotle liked organizing things and he did it meticulously. Aristotle founded the science of logic. Aristotle's logic is based on correlation of objects. To be exact, Aristotle uses the term "logic" as equivalent to verbal reasoning. Aristotle classifies words as : substance, quantity, quality, relation, place, time, situation , condition, action and passion. They are arranged according to the thought process we have when we try to discern objects. For example, we first ask, what the thing is (substance), then how

great it is (quantity), then what kind it is (quality) and so on. According to Aristotle, notions when isolated do not in themselves point toward truth or falsehood.

Only through the combination of ideas in a proposition, that truth and falsity are possible. The elements of such a proposition are noun and verb. A combination of words gives rise to rational speech and thought. These thoughts can take many forms but logic considers only those forms which express truth and falsehood. This truth and falsehood is determined by their agreement and disagreement with the facts they are trying to represent. Now when it comes to classifying things, Aristotle opined that first of all a definition must be established. A definition for Aristotle is a statement that shows the essential character of the object. Further another term is introduced which is – genus. Aristotle defines genus as the thing which differentiates the species from the objects in general.

This is similar in nature to what the term means in biology now. The genus definition must be so formed that it doesn't exclude any species. All in all, qualities within the genus must be wider than those possessed by the object but when the genus is taken together with "species" and other sub categories it must be exactly possess the same characteristics as the object under observation. From the above discussion we can see that the distinction between "form" and "substance" plays an important role in Aristotle's way of discerning things.

Ethics When talking about ethics, Aristotle asks two questions: 'How should we live ?' and 'What does it require to live a good life'. A quick answer to that is: Man can only achieve happiness by using all his abilities and capabilities. For Aristotle there are three forms of happiness. The first form of happiness is a life of pleasure and enjoyment. The second form of happiness is a life as a free and responsible citizen. The third form of happiness is a life as a thinker and philosopher. All three forms must be present at the same time and in balance for a man to find happiness and fulfillment. Aristotle believed in a life of balance, living one end to the extreme would mean missing out on a significant portion of human life.

The same applies for human relationships which Aristotle advocated as the "Golden mean" and also for eating. It seems that the Aristotle's ethics are derived

from that of Greek medicine which also advocates balance and temperance to live a harmonious life.

Politics Aristotle describes man as a “political animal”. He pointed out, that without society, we are not real people. Family and community satisfy our primary needs of food, warmth, marriage, and child rearing. Also, Aristotle believed that the highest form of human fellowship is only to be found in the state. Now, since state is of utmost importance, a question naturally arise as to how a state should be organized. Aristotle describes three forms of constitution with a distinct warning to each of them.The first is monarchy or kingship.

For monarchy to be good, it should not become a tyranny (when one ruler controls the state for self-aggrandizement). Second is aristocracy, in which there is a group of rulers. The warning here is that, it should not degenerate into oligarchy (group of rulers acting in self-interest at the expense of the general public). The final classification is polity or democracy. The negative aspect of this form of constitution is that it can develop into a mob rule.

Hellenistic philosophy The Greek philosophy began as speculation into the nature of the cosmos or universe (Meta Physics).The early philosophers, in the Pre-Socratic era, like Sophists, Democritus, Pythagoras and others made bold speculations about the origins and nature of the universe.With the advent of Socrates, Plato, and Aristotle, the focus of philosophy also shifted towards morality, virtues and ethics. However, due to the sudden death of Alexander the Great (in 323 BC), the whole of Greece fell into a state of uncertainty & local wars and later it became a province of Rome.The empires that succeeded him, known as the Hellenistic empires, lasted for hundreds of years and spread Greek culture over huge territories.

As the life of the average citizen was changing, the prevalent philosophical thought also underwent a change.Political, social and moral environment no longer sustained the creative impulses in philosophical thought and this gave rise to Hellenistic Age or post-Aristotelian philosophy.A common element of the philosophers in Hellenistic age was that the focus of Philosophy was shifting from general understanding of the universe to individual life and its perception as an “art of

life”. Philosophy ends up being a driver of life and a source of relief, a healing art, a way to cope with a hostile world.This period saw the emergence of the three great schools of moral philosophy. Epicureanism, Stoicism and Skepticism.

EpicureanismThis school derives its name from its founder Epicurus, who founded his school on the outskirts of Athens and famously called it as the Garden (307 BC).Epicureanism teaches that the greatest good is to seek modest pleasures in order to attain a state of **t**ranquillity, freedom from fear ("ataraxia") and absence from bodily pain ("aponia").Freedom from Fear**:** According to this school of thought, all people live in a constant state of irrational fear, anxiety & superstition and these factors keep humans in a state of pain. The biggest causes of these factors are the fear of death, the fear of being trapped in some really terrible afterlife for all of eternity and a fear of the gods.No fear of God**:** This can be depicted in the concept of "Problem of evil" which stated that:

The Stoics taught that becoming a clear, unbiased and self-disciplined thinker allows one to understand the "logos" (the natural universal reason in all things). Important aspect of Stoicism involves improving the individual’s ethical and moral well-being by having a will which is in agreement with Nature, and by practising the four cardinal virtues: wisdom, courage, justice and temperance. Skepticism. It is also known as Pyrrhonism or Pyrrhonic. Skepticism after the early proponent Pyrrho of Elis. Skepticism holds that one should refrain from making truth claims, and avoid the postulation of final truths.

1.2.5. Philosophy of the Middle age

Medieval philosophy is the philosophy that existed through the Middle Ages, the period roughly extending from the fall of the Western Roman Empire in the 5th century to the Renaissance in the 15th century. Medieval philosophy, understood as a project of independent philosophical inquiry. The history of medieval philosophy is traditionally divided into two main periods: the period in the Latin West following the Early Middle Ages until the 12th century, when the works of Aristotle and Plato were rediscovered, translated, and studied upon, and the "golden age" of the 12th, 13th and 14th centuries in the Latin West, which witnessed the

culmination of the recovery of ancient philosophy, along with the reception of its Arabic commentators, and significant developments in the fields of philosophy of religion, logic, and metaphysics.

The problems discussed throughout this period are the relation of faith to reason, the existence and simplicity of God, the purpose of theology and metaphysics, and the problems of knowledge, of universals, and of individuation. Medieval philosophy places heavy emphasis on the theological. With the possible exceptions of Avicenna and Averroes, medieval thinkers did not consider themselves philosophers at all: for them, the philosophers were the ancient paganwriters such as Plato and Aristotle. However, their theology used the methods and logical techniques of the ancient philosophers to address difficult theological questions and points of doctrine. Thomas Aquinas, following Peter Damian, argued that philosophy is the handmaiden of theology (ancilla theologiae).

Despite this view of philosophy as the servant of theology, this did not prevent the medievals from developing original and innovative philosophies against the backdrop of their theological projects. For instance, such thinkers as Augustine of Hippo and Thomas of Aquinas made monumental breakthroughs in the philosophy of temporality and metaphysics, respectively.

The principles that underlie all the medieval philsophers' work are: the use of logic, dialectic, and analysis to discover the truth, known as ratio; respect for the insights of ancient philosophers, in particular Aristotle, and deference to their authority (auctoritas); the obligation to co-ordinate the insights of philosophy with theological teaching and revelation (concordia).

One of the most heavily debated things of the period was that of faith versus reason. Avicenna and Averroes both leaned more on the side of reason. Augustine stated that he would never allow his philosophical investigations to go beyond the authority of God. Anselm attempted to defend against what he saw as partly an assault on faith, with an approach allowing for both faith and reason. The Augustinian solution to the faith/reason problem is to believe, and then seek to understand.

Early Christian thought, in particular in the patristic period, tends to be intuitional and mystical, and is less reliant on reason and logical argument. It also places more emphasis on the sometimes-mystical doctrines of Plato, and less upon the systematic thinking of Aristotle. Much of the work of Aristotle was unknown in the West in this period. Scholars relied on translations by Boethius into Latin of Aristotle's Categories, the logical work On Interpretation, and his Latin translation of Porphyry's Isagoge, a commentary on Aristotle's Categories.

Two Roman philosophers had a great influence on the development of medieval philosophy: Augustine and Boethius. Augustine is regarded as the greatest of the Church Fathers. He is primarily a theologian and a devotional writer, but much of his writing is philosophical. His themes are truth, God, the human soul, the meaning of history, the state, sin, and salvation. For over a thousand years, there was hardly a Latin work of theology or philosophy that did not quote his writing, or invoke his authority. Some of his writing had an influence on the development of early modern philosophy, such as that of Descartes.

Anicius Manlius Severinus Boethius (480 c.–524) was a Christian philosopher born in Rome to an ancient and influential family. He became consul in 510 in the kingdom of the Ostrogoths. His influence on the early medieval period was also marked (so much so that it is sometimes called the Boethian period). He intended to translate all the works of Aristotle and Plato from the original Greek into Latin, and translated many of Aristotle's logical works, such as On Interpretation, and the Categories. He wrote commentaries on these works, and on the Isagoge by Porphyry (a commentary on the Categories). This introduced the problem of universals to the medieval world.

Scholastic period from the middle of the eleventh century to the middle of the fourteenth century is known as the 'High medieval' or 'scholastic' period. It is generally agreed to begin with Saint Anselm of Canterbury (1033–1109) an Italian philosopher, theologian, and church official who is famous as the originator of the ontological argument for the existence of God. The 13th and early 14th centuries are generally regarded as the high period of scholasticism. Scholasticism was a

medieval school of philosophy that employed a critical method of philosophical analysis presupposed upon a Latin Catholic theistic curriculum which dominated teaching in the medieval universities in Europe from about 1100 to 1700. It originated within the Christian monastic schools hat were the basis of the earliest European universities. The rise of scholasticism was closely associated with these schools that flourished in Italy, France, Spain and England.

Medieval philosophy is characteristically theological. Subjects discussed in this period include: the problem of the compatibility of the divine attributes: How are the attributes traditionally ascribed to the Supreme Being, such as unlimited power, knowledge of all things, infinite goodness, existence outside time, immateriality, and so on, logically consistent with one another?

The problem of evil: The classical philosophers had speculated on the nature of evil, but the problem of how an all-powerful, all-knowing, loving God could create a system of things in which evil exists first arose in the medieval period. The problem of free will: A similar problem was to explain how 'divine foreknowledge' – God's knowledge of what will happen in the future – is compatible with our belief in our own free will. Questions regarding the immortality of the intellect, the unity or non-unity between the soul and the intellect, and the consequent intellectual basis for believing in the immortality of the soul. The question of whether there can be substances which are non-material, for example, angels.

After the 'rediscovery' of Aristotle's Metaphysics in the mid-twelfth century, many scholastics wrote commentaries on this work (in particular Aquinas and Scotus). The problem of universals was one of the main problems engaged during that period. Other subjects included: hylomorphism – development of the Aristotelian doctrine that individual things are a compound of material and form (the statue is a compound of granite, and the form sculpted into it) Existence – being qua being. Causality – Discussion of causality consisted mostly of commentaries on Aristotle, mainly the Physics, On the Heavens, Generation and Corruption.

The approach to this subject area was uniquely medieval, the rational investigation of the universe being viewed as a way of approaching God. Duns Scotus' proof of the existence of God is based on the notion of causality.

The problem of individuation is to explain how we individuate or numerically distinguish the members of any kind for which it is given. The problem arose when it was required to explain how individual angels of the same species differ from one another. Angels are immaterial, and their numerical difference cannot be explained by the different matter they are made of. The main contributors to this discussion were Aquinas and Scotus.

1.2.6. Renaissance Philosophy

Renaissance was a period in European history marking the transition from the Middle Ages to modernity and covering the 15th and 16th centuries. It occurred after the Crisis of the Late Middle Ages and was associated with great social change. In addition to the standard periodization, proponents of a long Renaissance put its beginning in the 14th century and its end in the 17 th century. The traditional view focuses more on the early modern aspects of the Renaissance and argues that it was a break from the past, but many historians today focus more on its medieval aspects and argue that it was an extension of the Middle Ages.

The intellectual basis of the Renaissance was its version of humanism, derived from the concept of Roman Humanitas and the rediscovery of classical Greek philosophy, such as that of Protagoras, who said that "Man is the measure of all things." This new thinking became manifest in art, architecture, politics, science and literature. Early examples were the development of perspective in oil painting and the recycled knowledge of how to make concrete. Although the invention of metal movable type sped the dissemination of ideas from the later 15th century, the changes of the Renaissance were not uniformly experienced across Europe: the first traces appear in Italy as early as the late 13th century, in particular with the writings of Dante and the paintings of Giotto.

As a cultural movement, the Renaissance encompassed innovative flowering of Latin and vernacular literatures, beginning with the 14th-century resurgence of

learning based on classical sources, which contemporaries credited to Petrarch; the development of linear perspective and other techniques of rendering a more natural reality in painting; and gradual but widespread educational reform. In politics, the Renaissance contributed to the development of the customs and conventions of diplomacy, and in science to an increased reliance on observation and inductive reasoning. Although the Renaissance saw revolutions in many intellectual pursuits, as well as social and political upheaval, it is perhaps best known for its artistic developments and the contributions of such polymaths as Leonardo da Vinci and Michelangelo, who inspired the term "Renaissance man".

Renaissance humanism was a revival in the study of classical antiquity, at first in Italy and then spreading across Western Europe n the 14th, 15th, and 16th centuries. Contemporary use of the term humanism is consistent with the historical use prominent in that period, while Renaissance humanism is a retronym used to distinguish it from later humanist developments.

During the Renaissance period most humanists were religious, so their concern was to "purify and renew Christianity" not to do away with it. Their vision was to return ad fonts ("to the sources") to the simplicity of the New Testament, bypassing the complexities of medieval theology. Today, by contrast, the term humanism has come to signify "a worldview which denies the existence or relevance of God, or which is committed to a purely secular outlook."

While generally the Aristotelian structure of the branches of philosophy stayed in place, interesting developments and tensions were taking place within them. In moral philosophy, for instance, a position consistently held by Thomas Aquinas and his numerous followers was that its three subfields (ethics, economics, politics) were related to progressively wider spheres (the individual, the family and the community). Politics, Thomas thought, is more important than ethics because it considers the good of the greater number.

This position came under increasing strain in the Renaissance, as various thinkers claimed that Thomas's classifications were inaccurate, and that ethics were the most important part of morality.

It is very hard to generalize about the ways in which discussions of philosophical topics shifted in the Renaissance, mainly because to do so requires a detailed map of the period, something we do not yet have. We know that debates about the freedom of the will continued to flare up (for instance, in the famous exchanges between Erasmus and Martin Luther), that Spanish thinkers were increasingly obsessed with the notion of nobility, that duelling was a practice that generated a large literature in the sixteenth century (was it permissible or not?).

1.2.7. Philosophy of Modern Times: empiricism, rationalism and sensual

The center and the starting point of modern philosophy is reflective subject. It is the destruction of the medieval system of spiritual values. The Industrial revolution begins in the 17th century. It is the transition from manual to machine handicrafts. It is the development of mathematics and mechanics. Main purpose of philosophy is justification ways of achieving knowledge. It is a problem of methodology of knowledge. Deism is the recognition of God as the root cause of the nature's development. God is an impersonal cause of the world (Galileo, Kepler and Newton).Mechanics in 17th century considered a universal science. All natural and social processes were reduced to mechanical forms of movement. Empiricism the main source of reliable scientific knowledge is experience.

Empiricism is focused on the natural sciences. Bacon is the main representative of empiricism. Bacon wrote a treatise "The new Organon". Bacon's motto is: «Knowledge is force». Knowledge encourages people to action. The purpose of scientific knowledge is good to the human race. Philosophy should be possible to be associated with the results of practical human activity. The methods of empirical knowledge are the analysis, observation, experiment.

The basic method of science is induction. The human mind must be freed from the "idols" (preconceived ideas). The idols of the mind. Bacon discusses the causes of human error in the pursuit of knowledge. He invented the metaphor of "idol" to refer to such causes of human error. Bacon distinguishes four idols, or main varieties of proneness to error. The idols of the tribe are certain intellectual

faults that are universal to mankind, or, at any rate, very common. One, for example, is a tendency toward oversimplification, that is, toward supposing, for the sake of tidiness, that there exists more order in a field of inquiry than there actually is.

Another is a propensity to be overly influenced by particularly sudden or exciting occurrences that are in fact unrepresentative. The idols of the cave are the intellectual peculiarities of individuals. One person may concentrate on the likenesses, another on the differences, between things. One may fasten on detail, another on the totality. The idols of the marketplace are the kinds of error for which language is responsible. It has always been a distinguishing feature of English philosophy to emphasize the unreliable nature of language, which is seen nominalist, as a human improvisation.

Rationalism means that sources of knowledge are the reason, logical reasoning and theoretical generalizations. Rationalism focuses on mathematics. Rene Descartes is the founder of rationalism. Descartes's books are “Discourse of Method” and “Principles of Philosophy”. Descartes believed that the feelings are distorting reality. The main method of knowledge is deduction. It is the reliance on reliable axiom. Only argument, the idea may be true («I think, therefore I exist».) Doubt is a search of reliable knowledge. “Universal mathematics” is a single scientific method. The world is a machine as a set of aggregates.

According to sensual mental life mainly consists of representations and associations, all based upon sense data and internal sensations; language exteriorizes mental life, so meanings are mainly equated with successive representations. This view became prominent in the 18th century and, despite criticism (for example by Humboldt), it continued during the whole 19th century. Condillac, Steinthal and Paul are well-known defenders. From the end of the 19th century onwards, this view was gradually abandoned in favor of a more active view of mental life. Meanings of words and sentences were no longer seen as purely representational.

1.2.8. German Classical Philosophy: Kant, Gegel, Feuerbach

Immanuel Kant (1724-1804). The keystone of Kant's philosophy, sometimes called critical philosophy, is contained in his «Critique of Pure Reason» (1781), in

which he examined the bases of human knowledge and created an individual epistemology. Like earlier philosophers, Kant differentiated modes of thinking into analytic and synthetic propositions. An analytic proposition is one in which the predicate is contained in the subject, as in the statement “Black houses are houses.”

The truth of this type of proposition is evident, because to state the reverse would be to make the proposition self-contradictory. Such propositions are called analytic because truth is discovered by the analysis of the concept itself. Synthetic propositions, on the other hand, are those that cannot be arrived at by pure analysis, as in the statement “The house is black.” All the common propositions that result from experience of the world are synthetic.

Propositions, according to Kant, can also be divided into two other types: empirical and a priori. Empirical propositions depend entirely on sense perception, but a priori propositions have a fundamental validity and are not based on such perception. The difference between these two types of proposition may be illustrated by the empirical “The house is black” and the a priori “Two plus two makes four.” Kant's thesis in the Critique is that it is possible to make synthetic a priori judgments. This philosophical position is usually known as transcendentalism.

In describing how this type of judgment is possible Kant regarded the objects of the material world as fundamentally unknowable; from the point of view of reason, they serve merely as the raw material from which sensations are formed. Objects of themselves have no existence, and space and time exist only as part of the mind, as “intuitions” by which perceptions are measured and judged.

In addition to these intuitions, Kant stated that a number of a priori concepts, which he called categories, also exist. He divided the categories into four groups: those concerning quantity, which are unity, plurality, and totality; those concerning quality, which are reality, negation, and limitation; those concerning relation, which are substance-and-accident, cause-and-effect, and reciprocity; and those concerning modality, which are possibility, existence, and necessity.

The intuitions and the categories can be applied to make judgments about experiences and perceptions, but cannot, according to Kant, be applied to abstract

ideas such as freedom and existence without leading to inconsistencies in the form of pairs of contradictory propositions, or “antinomies,” in which both members of each pair can be proved true.

In the Metaphysics of Ethics (1797) Kant described his ethical system, which is based on a belief that the reason is the final authority for morality. Actions of any sort, he believed, must be undertaken from a sense of duty dictated by reason, and no action performed for expediency or solely in obedience to law or custom can be regarded as moral.

Kant described two types of commands given by reason: the hypothetical imperative, which dictates a given course of action to reach a specific end; and the categorical imperative, which dictates a course of action that must be followed because of its rightness and necessity. The categorical imperative is the basis of morality and was stated by Kant in these words: “Act as if the maxim of your action were to become through your will a general natural law.”

Kant's ethical ideas are a logical outcome of his belief in the fundamental freedom of the individual as stated in his «Critique of Practical» (1788).

This freedom he did not regard as the lawless freedom of anarchy, but rather as the freedom of self-government, the freedom to obey consciously the laws of the universe as revealed by reason. He believed that the welfare of each individual should properly be regarded as an end in itself and that the world was progressing toward an ideal society in which reason would “bind every law giver to make his laws in such a way that they could have sprung from the united will of an entire people, and to regard every subject, in so far as he wishes to be a citizen, on the basis of whether he has conformed to that will.” In his treatise «Perpetual Peace» (1795) Kant advocated the establishment of a world federation of republican states.

Kant had a greater influence than any other philosopher of modern times. Kantian philosophy, particularly as developed by the German philosopher Georg Wilhelm Friedrich Hegel, was the basis on which the structure of Marxism was built; Hegel's dialectical method, which was used by Karl Marx, was an outgrowth of the method of reasoning by “antinomies” that Kant used.

The German philosopher Johann Fichte, Kant's pupil, rejected his teacher's division of the world into objective and subjective parts and developed an idealistic philosophy that also had great influence on 19th-century socialists. One of Kant's successors at the University of Königsberg, J. F. Herbart, incorporated some of Kant's ideas in his system of pedagogy.

Empiricists, such as Locke, Berkeley, and Hume, argued that human knowledge originates in our sensations. Locke, for instance, was a representative realist about the external world and placed great confidence in the ability of the senses to inform us of the properties that empirical objects really have in themselves. Locke had also argued that the mind is a blank slate, or a tabula rasa, that becomes populated with ideas by its interactions with the world.

Experience teaches us everything, including concepts of relationship, identity, causation, and so on. Kant argues that the blank slate model of the mind is insufficient to explain the beliefs about objects that we have; some components of our beliefs must be brought by the mind to experience.

Berkeley’s strict phenomenal in contrast to Locke, raised questions about the inference from the character of our sensations to conclusions about the real properties of mind-independent objects. Since the human mind is strictly limited to the senses for its input, Berkeley argued, it has no independent means by which to verify the accuracy of the match between sensations and the properties that objects possess in themselves. In fact, Berkeley rejected the very idea of mind-independent objects on the grounds that a mind is, by its nature, incapable of possessing an idea of such a thing. Hence, in Kant’s terms, Berkeley was a material idealist.

To the material idealist, knowledge of material objects is ideal or unachievable, not real. For Berkeley, mind-independent material objects are impossible and unknowable. In our sense experience we only have access to our mental representations, not to objects themselves. Berkeley argues that our judgments about objects are really judgments about these mental representations alone, not the substance that gives rise to them. In the Refutation of Material Idealism, Kant argues

that material idealism is actually incompatible with a position that Berkeley held, namely that we are capable of making judgments about our experience.

David Hume pursued Berkeley's empirical line of inquiry even further, calling into question even more of our common sense beliefs about the source and support of our sense perceptions. Hume maintains that we cannot provide a priori or a posteriori justifications for a number of our beliefs like, "Objects and subjects persist identically over time," or "Every event must have a cause." In Hume's hands, it becomes clear that empiricism cannot give us an epistemological justification for the claims about objects, subjects, and causes that we took to be most obvious and certain about the world.

Kant expresses deep dissatisfaction with the idealistic and seemingly skeptical results of the empirical lines of inquiry. In each case, Kant gives a number of arguments to show that Locke's, Berkeley's, and Hume's empiricist positions are untenable because they necessarily presupposes the very claims they set out to disprove. In fact, any coherent account of how we perform even the most rudimentary mental acts of self-awareness and making judgments about objects must presuppose these claims, Kant argues. Hence, while Kant is sympathetic with many parts of empiricism, ultimately it cannot be a satisfactory account of our experience of the world.

The Rationalists, principally Descartes, Spinoza, and Leibniz, approached the problems of human knowledge from another angle. They hoped to escape the epistemological confines of the mind by constructing knowledge of the external world, the self, the soul, God, ethics, and science out of the simplest, indubitable ideas possessed innately by the mind.

Leibniz in particular, thought that the world was knowable a priori, through an analysis of ideas and derivations done through logic. Supersensible knowledge, the Rationalists argued, can be achieved by means of reason. Descartes believed that certain truths, that "if I am thinking, I exist," for example, are invulnerable to the most pernicious skepticism. Armed with the knowledge of his own existence, Descartes hoped to build a foundation for all knowledge.

Kant's Refutation of Material Idealism works against Descartes' project as well as Berkeley's. Descartes believed that he could infer the existence of objects in space outside of him based on his awareness of his own existence coupled with an argument that God exists and is not deceiving him about the evidence of his senses. Kant argues in the Refutation chapter that knowledge of external objects cannot be inferential. Rather, the capacity to be aware of one's own existence in Descartes' famous cogito argument already presupposes that existence of objects in space and time outside of me.

Kant had also come to doubt the claims of the Rationalists because of what he called Antinomies, or contradictory, but validly proven pairs of claims that reason is compelled toward. From the basic principles that the Rationalists held, it is possible, Kant argues, to prove conflicting claims like, "The world has a beginning in time and is limited as regards space," and "The world has no beginning, and no limits in space." (A 426/B 454) Kant claims that antinomies like this one reveal fundamental methodological and metaphysical mistakes in the rationalist project. The contradictory claims could both be proven because they both shared the mistaken metaphysical assumption that we can have knowledge of things as they are in themselves, independent of the conditions of our experience of them.

The Antinomies can be resolved, Kant argues, if we understand the proper function and domain of the various faculties that contribute to produce knowledge. We must recognize that we cannot know things as they are in themselves and that our knowledge is subject to the conditions of our experience. The Rationalist project was doomed to failure because it did not take note of the contribution that our faculty of reason makes to our experience of objects. Their a priori analysis of our ideas could inform us about the content of our ideas, but it could not give a coherent demonstration of metaphysical truths about the external world, the self, the soul, God, and so on.

Hegel (1770-1831) main books: «Phenomenology of spirit»,«Science logic», «Encyclopedia of Philosophy».There are three parts of philosophical system: logic, philosophy of nature and philosophy of spirit. The logic is the domain of "pure

thought" (before subject and object). Main idea of Hegel's ontology – thinking is equivalent to being, reason is the substance, the basis of the world is an idealistic start "absolute idea", which is in the process of development and formation. The development of ideas is a dialectical process.

Principles and categories of dialectics Principles: the principle of transition of quantitative change to qualitative change, the principle of unity and struggle of opposites, denial principle. Categories: essence, contents, common, principle, phenomenon, form, single, random.

Three stages of the World Spirit's is development. Synthesis it's being of "Absolute spirit world". Antithesis it's being of nature. In which the idea turns. Thesis it is before nature being of "pure idea" into logical categories and concepts. At the third stage the World Spirit begins to manifest itself in human society. 3 Being of Absolute Spirit. It is the infinite freedom, expressed in art, religion and philosophy. Absolute Spirit is the ultimate manifestation of the spirit. It is always effective truth. 2 Being of Objective Spirit. It is common human reason expressed in various forms of social life: family, the state, politics, etc. 1. Subjective Spirit is the logic of the individual. Subjective Spirit is the individual mind.

Through the human conscious activity it is able to understand the principles of the spirit. And it is able to give higher meaning for natural and social progress. Art – (thesis).It is an individual project of the Absolute idea. Religion – (antithesis for art).Absolute idea disclosed to human by God in the form of revelation. Philosophy – (synthesis of art and religion).It is the knowledge of God-given and understandable for people. Philosophy is a full disclosure of all truth. It is higher knowledge. Humanity and World Spirit will understand themselves and achieved complete freedom.

Ludwig Feuerbach (1804-1872) was a German materialist philosopher. According to Feuerbach, philosophy is the science of reality in its authenticity and integrity, but the embodiment of reality is nature. "Nature has created not only a workshop for the stomach it has also erected a temple for the brain." The main question of philosophy is the question of the relationship between the body and the

soul of a person. Matter precedes spirit. At the center of Feuerbach's philosophy is man, but as a generic concept, i.e. abstract man. "Man is the only universal and highest subject of philosophy." He is a material object and at the same time a think subject a psychophysical being. Human nature is not social, but purely biological. Man is a natural being. People are connected with each other only by natural, natural relationships.

The riddle of man is the riddle of all world problems. Therefore, philosophy must study man it must become anthropology (the science of man).

In his work – The Essence of Christianity (1841) – Feuerbach developed ideas about the earthly origin of religion. The real basis or cause of religion is rooted in the nature of man, in the conditions of his life. Religion is an expression of man's sensual dependence on earthly reality. Religion and idealism have the same basis – the endowment with an independent essence of one of the attributes of the human race - thinking, which only in fantasy can be torn off from a person and opposed to him. Religion is the unconscious self-consciousness of man.

Rejecting the religious cult of man, Feuerbach contrasted it with the cult of man, clothed by him in a religious shell of "deification" of man. Feuerbach's worldview ends with the doctrine of morality, proceeding from the unity and interconnection of "I" and "You". The pursuit of happiness is the driving force of the human will; it entails the consciousness of moral duty, because "I" cannot be happy and even exist without "You". The desire for one's own happiness outgrows the framework of selfishness, it is not achievable without human unity.

The ideas of German classical philosophy are of great importance not only for modern philosophy, but also for modern science and education. These are, first of all, the ideas of constructivism, dialectics and the categorical imperative of I. Kant, the system of dialectics of G.V.F. Hegel, his doctrine of the universal connection and development of all phenomena of reality, materialistic, anthropological and communicative ideas of L. Feuerbach.

1.2.9. Philosophy of the Marxism: Dialectical and historical materialism

Dialectical and historical materialism is the philosophy of Marxism. It is method for understanding nature, history and society. Marxism began as a philosophy, and the philosophical method of Marxism is of fundamental importance in understanding the ideas of Marx and Engels.

Marxism is a social, political, and economic philosophy named after the 19th-century German philosopher and economist Karl Marx. His work examines the historical effects of capitalism on labor, productivity, and economic development, and argues that a worker revolution is needed to replace capitalism with a communist system.

Karl Marx (1818–1883) is often treated as a revolutionary, an activist rather than a philosopher, whose works inspired the foundation of many communist regimes in the twentieth century. It is certainly hard to find many thinkers who can be said to have had comparable influence in the creation of the modern world. However, Marx was trained as a philosopher, and although often portrayed as moving away from philosophy in his mid-twenties – perhaps towards history and the social sciences – there are many points of contact with modern philosophical debates throughout his writings.

In 1845, Karl Marx declared “philosophers have only interpreted the world in various ways; the point is to change it”.

Marxism is first and foremost a world outlook, or philosophy if you prefer. It has a vast scope. It is a theory of history and of economics, and also a guide to revolutionary action. Marx himself explained that there were three main sources to his ideas: there was English classical bourgeois economics (Adam Smith and David Ricardo), then there were the bold pioneers of utopian socialism: the Frenchmen Saint-Simon and Fourier. t the first and most important element in the formative stages of the ideas of Marx and Engels was without doubt German classical philosophy, particularly Hegel. And this, in turn, was the product of a lengthy period of the development of many different schools of philosophical thought.

All the writings of Marx and Engels are based on a definite philosophical method and cannot be understood without it, the method of dialectical materialism. The same is true of the works of Lenin and Trotsky, the most outstanding representatives of Marxist thought in the twentieth century. Dialectics was already known to the ancient Greeks and was later developed by Hegel. The basic ideas of dialectical materialism are not so difficult to grasp. Like all great ideas, they are essentially simple, and they are beautiful in their simplicity.

Marxists view dialectics as a framework for development in which contradiction plays the central role as the source of development. This is perhaps best exemplified in Marx's Capital, which outlines two of his central theories: that of the theory of surplus value and the materialist conception of history.

In Capital, Marx had the following to say about his dialectical methodology: "In its rational form it is a scandal and abomination to bourgeois and its doctrinaire professors, because it includes in its comprehension an affirmative recognition of the existing state of things, at the same time also, the recognition of the negation of that state, of its inevitable breaking up; because it regards every historically developed social form as in fluid movement, and therefore takes into account its transient nature not less than its momentary existence; because it lets nothing impose upon it, and is in its essence critical." To do philosophy properly, Marx thought, we have to form theories that capture the concrete details of real people's lives – to make theory fully grounded in practice.

Marx argued social change is driven by the tension created within an existing social order through technological and organizational innovations in production. Technology-driven changes in production make new social forms possible, such that old social forms and classes become outmoded and displaced by new ones. Once, the dominant class were the land owning lords. But the new industrial system produced a new dominant class: the capitalists.

Marxism posits that the struggle between social classes specifically between the bourgeoisie, or capitalists, and the proletariat, or workers defines economic relations in a capitalist economy and will lead inevitably to a communist revolution.

Dialectical materialism distinguishes itself from classic materialism by insisting on dialectic process, as opposed to mechanism, in the development of things. Matter is subject to laws that are causal and determinist but not mechanist. It evolves toward the better and more complex, and it does so in a series of revolutionary jumps, in which accumulations of quantitative difference produce sudden qualitative changes after a period of tension and conflict. Matter is the unique reality. Chance does not exist, and there is no breach in this absolute monism.

Mind is an epiphenomenon producing, in consciousness, reflections of matter. Matter does not determine mind directly, as the medical materialists said, but indirectly, by way of society. Society, too, develops dialectically, in revolutionary jumps that resolve its recurrent self-contradictions or internal conflicts. Human liberty consists in awareness of the necessity of social process.

1.2.10. Non-classical philosophy and its main directions

The term "non-classical philosophy" is quite controversial and is mainly inherent in the Russian-language philosophical discourse, dating back to MMK (Moscow Methodological Circle) and proposed by the brilliant thinker Merab Mamardashvili in relation to the types of rationality. The classical type of rationality and the philosophical tradition based on it (beginning with Hellenic philosophy and up to German critical philosophy) have always been distinguished by the cult of reason and knowledge both about the root causes of the world and about the ways and forms of its comprehension.

Reason was conceived as a generic essence of a person and was interpreted differently depending on the era and its main value-semantic dominants (from Socrates' "Know thyself", which communed the Reason of the Middle Ages, creating in the Renaissance culture and to the Hegelian "universal reasonableness"). In German and English-speaking philosophy, as a rule, the concepts "classical", "modern" and "postmodern" are used to refer to different types, styles and problem fields of philosophy, aesthetics and art up to the 21st century.

Traditionally, the term "non-classical" philosophy is associated with a fundamentally new philosophical problem field, in which the search for answers to the most significant questions takes place in a new type of rationality, paradoxical in its essence and becoming at the turn of modern and contemporary history. Such a boundary is the 19th century, which is rightfully considered “golden”. This is the time of great discoveries and inventions, the time of the establishment of the capitalist industry and, accordingly, a new type of economic relations, and the time of dramatic upheavals.

In the field of philosophy, fundamental changes are obvious: the dilemma of rationalism and empiricism is being replaced by the dilemma of rationalism and irrationalism. So, it was at this time that the formation of a non-classical type of rationality and non-classical philosophy took place, which radically changed the spiritual appearance of the entire subsequent development of world culture. The establishment of a new problematic field, a new language and ways of expressing spiritual searches takes place already in the 20th century.

Initially, non-classical philosophy arises and develops as a negative reaction to the classical tradition with its attitudes towards objectivism in understanding both the world and man, universalism, adherence to strict rationalism in a given problem field, scientism, with the value of only that knowledge that corresponds to the ideals of science. In general, non-classical philosophy develops as a kind of philosophical and worldview version of anti-scientism within the existential type of thinking. The first persons who can rightfully be considered the founders of the new tradition were F. Schleiermacher, the founder of philosophical hermeneutics, and S. Kierkegaard, the founder of existentialism.

The grounds for such shifts in philosophy are profound changes in the whole culture, without which the fundamental purposeful distance of new philosophical discourses from the previous classical ways of understanding the world and ways of human self-identification would be impossible.

The tragic shifts and upheavals of the culture of the 19th-20th centuries, wars, crises, disappointments in the traditional system of values, in classical hu-

manism, the crisis of religious consciousness, and much more ultimately led to a change in the problematic field of philosophy.

Philosophy begins to see the world and man in it in a new way. Obviously, the desire of many authors from Kierkegaard to Camus to see and embody in philosophy the projection of human interests, desires, fears and hopes. Rehabilitating everyday life, everyday life, the new philosophy is an attempt to bridge the gap between what a person feels, says, does. All this is possible only if philosophy grasps and expresses the deep foundations of human existence, its non-rational forms (will, intuition, the sphere of the unconscious), creating a new ontology of man. There is a priority of non-rational forms, such as will, intuition and even instinct, over rational ones.

The goal of philosophy is the desire to reveal the secret of subjectivity, human uniqueness in its entirety, to express the inexpressible, therefore, to help a person "survive" life. Self-knowledge is thought impossible without consideration and understanding of strange and complex emotional and psychological states (pain, fear, loneliness, despair, love). A new problematic field necessarily sets a new language – the philosophical search is now articulated not in strict categories and concepts. He lives in images, metaphors, associations and allusions.

Philosophical texts that can be embodied in an aphoristic form (Nietzsche), in the form of a work of art (Kierkegaard, Dostoevsky, Sartre and Camus) express new worldview principles that are not known to the classics – pluralism, dialogism, polyphony.

Non-classical philosophy, which rehabilitated everyday life, pain and problems of an ordinary person, is nothing more than a special reflexive reaction to the main setting of classical philosophy on the cult of reason and the maximum rationalizations of all spheres of modern culture associated with it (the logical and geometric rigor of the architecture of classicism, the Hegelian principle of identity being and thinking).

Its ethical-irrationalist directions maximally expressed the most significant shifts in culture. Its main areas traditionally include existentialism, hermeneutics,

intuitionism, and philosophy of life. However, it is existentialism that is the most authoritative and largest trend in non-classical philosophy of the 20th century, which has had the greatest influence on philosophy, science, and art.

Such a selection of the main directions of overcoming classical philosophy and, above all, Hegelian idealism is rather arbitrary and denotes not individual narrow schools, but a certain type of thinking based on a non-classical type of rationality. Consequently, non-classical philosophy arises as an "antithesis" of classical philosophy, which finds expression in such features as:

pluralism and heterogeneity;

philosophical irrationalism and anti-scientism;

shifting the center of philosophical problems from the Universe and its ultimate foundations to man and various phenomena of his being (absurdity, freedom, pain, fear, loneliness, pleasure, play, etc.);

rejection of the classical interpretation of being as an abstract-impersonal independent entity that sets the main meaning of human existence - rationality, and the goal – knowledge;

the dominant of non-classical ontology is not the existence of the world, but the individual existence of a person in the stream of life, contradictory and constantly becoming.

From the very first attempts to express a new type of philosophical worldview, we see a desire to oppose reason with its ideal of scientific character and the cult of true knowledge with the elements of life itself in its complexity and fluidity. The formation of a new philosophical tradition at first did not have a systematic design, and the main content did not go beyond classical rationality. This is evidenced by the teachings of Rousseau with his idea of a return to nature and naturalness, Goethe and his idea of beauty and the element of feelings, since they set the task of harmonizing various elements of the process of human cognition – reason, will, emotions, fantasies, and not fundamentally change philosophical problems. All this, however, can be seen as the forerunner of a new philosophy.

However, already in the German classics, the rejection of the abstract nature of Hegelian idealism can be traced already in the late Schelling as a turn from the general to the individual, as an appeal to the facticity of the world. Consequently, non-classical philosophy begins with the expansion and then complete replacement of the subject of philosophical reflection, rethinking its essence and goals, changing its language. An attempt is being made to see in philosophy a projection of human interests, aspirations, an attempt to express the truth of subjectivity.

Classical philosophy, since Antiquity, has been characterized by anonymity in its approach to the individual. Both man and the world in it were considered from the point of view of the eternal and universal as impersonal (i.e., interest in the generic, general in philosophy and science, and typical in art). Non-classical philosophy seeks to overcome this limitation of classical rationalism, to return to the existence of a person a concrete-life fullness with all the richness of his experiences-states, the uniqueness of his everyday experience.

Such shifts undoubtedly lead to the fact that anti-scientism, irrationalism as a rejection of the idea of reason as the fundamental and sometimes the only setting, become the hallmark of philosophical searches. Such a philosophical experience, which develops as an existential type of thinking, not only influenced the problematic field of philosophy itself, but also largely set new vectors for the development of world culture, including science and art. It was the type of thinking that united the main directions of the first stage of no-classics, which lasted until the middle of the twentieth century: hermeneutics, intuitionism, phenomenology, philosophy of life, psychoanalysis, existentialism.

Fundamental changes in the problem field and the corresponding language are connected with the fact that philosophy is now building both a new ontology and a new epistemology, etc. The center of all philosophical searches and discourses is the Man, or rather human subjectivity, which is impossible and meaningless to reduce either to the various results of human activity, or to the forms and methods of a person's detection of his presence in the world, or to the phenomena and processes of the world itself. The emphasis on human subjectivity gives the

new philosophy a new character: it loses its speculativeness and tends to become a "practical" philosophy. The developing and attention-grabbing directions of the new philosophical tradition, with all their diversity and differences, are united by a number of features:

− a sharp dissociation from the classical philosophy of reflexive analysis, a conscious break with it;

− changing the field of philosophical problems due to the inclusion in it of the everyday experience of a real person in its unique concreteness and completeness;

− attitude to reason and rationality not as the only source of knowledge about the world and, above all, about oneself, but as secondary and rooted in some original ontological integrity;

− affirmation of the specifics of human existence through experience, freedom, responsibility, choice, creativity.

The central problems of existentialism are considered to be the problem of human existence, the problem of choice, the problem of freedom. S. Kierkegaard (1813-1855) for the first time in the history of European intellectualism rethinks the meaning of philosophy, its goal, accusing all previous philosophy after Socrates of "falling into sin", the rejection of man: not an appeal to the essence of the world, but to the essence of human existence, not the truth of being, but the truth of man, his subjectivity, arguing that the truth is not what you know, but what you are.

Such shifts in the problem field entail a change in the language. The mystery of subjectivity does not lend itself to rational discourse, but is given in the form of a poetic essay, an artistic image, an allegory, a parable. In his works “Either-Or”, “Fear and Trembling”, the author claims that truth can only be existential, inseparable from human existence. Thanks to this thesis alone, Kierkegaard refutes Hegel's "identity of being and thinking" and rejects objective scientific thinking, which, in his opinion, is "thinking in which there is no thinker."

Kierkegaard calls for turning to the inner world of the individual in order to try to express the truth of subjectivity. To do this, it is necessary to realize the truth as an attitude, behavior in practice. In this regard, religious life and artistic creativi-

ty are of particular interest, since they most fully embody the uniqueness of existence, its individual experience.

Man's striving to be himself, according to Kierkegaard, begins with an aesthetic stage oriented toward the external, toward enjoyment. Authentic existence is accompanied by choice, despair and rebellion. Choice as the exercise of freedom means an absolute choice of the stage of existence, into the sphere of due, above which is only the religious stage, at which the lost meaning of life is acquired.

Dialogic and historicity are brought to the fore as the basic principles of both existence and understanding of human subjectivity. In addition, thanks to hermeneutic philosophy, artistic creativity as a whole acquires special significance, since it is precisely it that maximally grasps and expresses the secret of subjectivity, articulates what is sometimes hidden for the person himself. The main directions of philosophical non-classics:

Psychoanalytic philosophy (Freudianism – neo-Freudianism, a new look at a person, his psyche, the inclusion of the unconscious in it).

Existentialism (beginning with Kierkegaard and his movement from despair to the absurd, from the absurd to faith in God and man; Sartre with his movement from existence to essence; Camus and his idea of absurdity and rebellion; German existentialism Jaspers, Heidegger).

Philosophy of life (Schopenhauer, Nietzsche: from being to the will and elements of life).

Hermeneutics or “understanding” philosophy (Schleiermacher, Dilthey, Heidegger, Gadamer: from Self to Other).

Phenomenology (Husserl and his project of a new philosophy: "back to things"; intentionality of consciousness).

The origins of postmodernism as a special type of philosophizing, opposing itself to classical and non-classical philosophical traditions, emerging in the second half of the twentieth century, are non-classical philosophy and, above all, new artistic practices. Just like non-classics, postmodernism creates a new problem field and a language corresponding to it. If the philosophy of the first half of the 20th

century shifts the center of the search from Being to Man, then the second half of the 20th century demonstrates the rejection of centering and fundamental pluralism. Philosophical postmodern can be described as an intellectual and artistic-aesthetic game with both classical and non-classical concepts and values.

This is a new type of thinking that is distinguished by mosaicism, collage, rejection of dialectics as a way of obtaining knowledge, determinism, dichotomy and differentiation, logocentrism and the search for the unity of the essence and genesis of the entire universe, the ontologization of chaos and chance. Postmodernism, like modernism, arises at the turn of epochs, which is always accompanied by a crisis of worldview and, as a result, new searches for the meaning of human existence. These searches are taking place against the backdrop of a global transformation of the value system and basic cultural codes.

For the first time the term "postmodern" ("postmodernism") was used by the German philosopher Rudolf Panwitz in the work "The Crisis of European Culture", which was published in 1917. The term was used among aesthetic intellectuals to denote the crisis of all avant-garde art. But only two decades later, it acquired a philosophical status and scale, denoting a special philosophical and aesthetic paradigm of the late twentieth century.

This is how the famous architect C. Jencks interprets postmodern in his work The Language of Postmodern Architecture (1977). Prominent representatives of postmodern aesthetics are J.-F. Lyotard, J. Derrida, C. Jencks, J. Baudrillard, W. Eco, R. Bart, M. Pavic and many others. The philosophical program of postmodernism is fundamentally heterogeneous. It is (according to J. Habermass, J. Derrida, W. Eco) a kind of response to the crisis of the modernist worldview of the 20th century. In Russian-language literature, postmodernism develops as a reaction to the destruction of utopian consciousness, a special ideology that exists in the era of totalitarianism.

Postmodern fundamentally renounces any intellectual canons and even traditions. It rethinks the main problems, goals and boundaries of philosophy. Philosophy finally renounces any centrist attitudes - logocentrism, anthropocentrism.

Ontological issues as such are ignored, making an exception only for a kind of ontology of the word, which dictates new rules: polyphony, polylogue, collage, deconstruction, ultimately reduced to a game. In contrast to non-classical philosophy with its pathos “Death of God!”, Postmodern proclaims “Death of the Author!”, which opens up unlimited interpretation of any text and even symbol.

The text expands indefinitely, and its interpretation becomes infinite (Derrida). The world itself is conceived as a constant fluidity, consisting of certain fractals, each of which is both the center of a certain integrity and its periphery. Irony is articulated as "nostalgia" for culture.

The world-text becomes the most important concept of postmodernity. It is connected with the realization of thought-creativity as a desire to recreate the chaos of life through the artificially generated chaos of the work. The techniques and forms of this recreation include fragmentation, quotation and eclecticism.

If you try to define postmodernity, it will be as follows: postmodernity is a special intellectual and aesthetic game, both with classical and non-classical meanings, ideas and values. тPostmodern is a form of radical criticism of the mind, the overthrow of the idea of the sacral and spiritual dignity of man. Clearly outlined in the culture of the avant-garde, it is in the space of postmodernity that these trends have reached their apogee.

Postmodern tried to create, with the help of new means of expression, a completely new Value-semantic Universe, in which questions about the place of a person in the existence of culture, about the possibilities of philosophy and art and their purpose, about the specifics of visual or cognitive means, their "rules" and boundaries are fundamentally different. applicability. The postmodern declares itself, first of all, by a radical rejection of the problematic and linguistic field of the entire previous culture.

Now the topics, problems and categories that define a new picture of the world can be conditionally reduced to the following:

Everyday life, environment, happening, performance, flash mob are categories that organize the space of cultural existence;

Labyrinth, thing, simulacrum, hyper reality, corporality – categories that determine the way and form of culture's existence;

Game, eclecticism, deconstruction, collage, absurdity, text are categories that set the goal and mechanism of any creativity, including philosophical.

"Labyrinth" is a traditional image of culture, the symbolism of which has been historically modified, but it has always been present in culture.

However, only in postmodernity is this image interpreted as a basic one, rising to the level of a category. According to representatives of post culture, the significance of this category is due to its fundamental polysemy.

The world, in the interpretation of post culture, is a kind of complex, chaotic, unstructured variety that cannot be described from the standpoint of rationality. The labyrinth is precisely the image of the multidimensionality and variability of both the world itself and the existence of a person in the world. The symbolism of the labyrinth (“hidden”) is saturated with the prose of L. Borges (“In the circle of ruins”) and U. Eco (“The Name of the Rose”), it is actively used in the architecture of Hundertwasser in the cinema of P. Greenway.

Simulacrum (from French Simulacre - similarity, appearance) is one of the central categories of postclassics, developed by J. Baudrillard. This category is multifaceted, its meaning can change depending on the context, and most often it is intuitively comprehended. But if one tries to give its most general and, consequently, depleted meaning, then it can be clarified with the help of the terms "illusion", "empty shell", "substitute", "false form".

The theory of the simulacrum was developed by Baudrillard in line with his general concept of the crisis state of modern culture. Modern values are becoming more and more material in nature, consumer goods are beginning to prevail over the person himself. (It is no coincidence that “thing” is also one of the postmodern categories). The thing from an ordinary companion of human life has turned into its leading principle, into an essential category of consciousness. The life of modern man passes more under the sign of imitation of life than of life itself.

Man increasingly surrounds himself with simulacrum signs, which have replaced the natural world of nature and human emotionality with their artificial similarities. Virtual technologies, advertising, hallucinogens, artificial materials are the most obvious and simple examples of simulacra. The modern world consists of simulacra, which have acquired the character of self-sufficiency, ceasing to be only signs of another, true reality. Simulation, passing off absence as presence, leads to a mixture of the real and the imaginary, to a kind of “hyperreality”, in which modern man is doomed to exist.

A striking example of how simple things can be interpreted as art objects and give rise to a special reality with its own spatio-temporal continuum and audio-visual range is the excellent documentary by P. Fichli and D. Weiss “The Way of Things” (“Der Lauf der Dinge"). The performance, in unity with chemical and physical reactions, is the embodiment of the famous Goldberg machine, which, according to the domino principle. With the help of this category, various forms of art practices are described, based on the fundamental alogism of what is happening and interpreted not from the point of view of reason, but through some non-verbal intuitive forms of comprehending what is happening (the principle of “feeling”, hypnotic influence, “dissolution”).

"Hypertext" is postmodern categories that set the principle of the internal construction of an artistic, primarily literary, work. The idea of inter- and hypertext is based on the principles of the labyrinth and the game as fundamentally variant ways of constructing a work of art. The philosophical basis of inter- and hypertexts was hermeneutics, which considers "text" as a universal category of culture. The text can be embodied not only in written forms, but also in any other cultural symbols (architecture, music, folk customs, rituals). "Intertext" is a way of treating quotes, references, references to certain cultural symbols, names or situations that exist inside the author's text, as an independent work, which, in principle, can be "torn out" of context and "live" an independent life.

The use of intertext presupposes a very high level of education both of the author himself and of the readership, the ability to recognize and decipher hidden

paraphrases, traces of the presence of other cultural symbols in the text. Therefore, the introduction of intertext into the structure of a work is, to a large extent, characteristic of the elite trend of postmodern aesthetics. Examples of the active introduction of intertext are the novels of U. Eco, M. Pavic.

If the intertext is mainly turned "inside" the work, creating a multi-stage and complex "text in the text", "symbol in the symbol", then the hypertext is turned "outside", it brings the author's work into the cultural and semantic space of culture. Culture is always the simultaneous existence of the most diverse cultural traditions, styles and trends, it is polyphonic, “speaks” in different voices and therefore, in fact, any author’s work is not absolutely innovative and valuable in itself.

The author is always "loaded" with cultural symbols and semantics that he inherited. Recently, the concept of hypertext is most actively used in the context of virtual space. The Internet is practically limitless from an informational point of view and allows any user to actively penetrate into its space, create their own worlds and actively transform cyberspace.

“Every text is an intertext; other texts are present in it at various levels in more or less recognizable forms: texts of the previous culture and texts of the surrounding culture. Each text is a new fabric woven from old quotes. Fragments of cultural codes, formulas, rhythmic structures, fragments of social idioms - all of them are absorbed by the text and mixed in it, since there is always a language before the tex and around it ”R. Barth.

“Deconstruction” was introduced into the space of postmodern culture by the French philosopher Jacques Derrida, who himself explained the meaning of this concept using the example of a simple analogy of disassembling into parts, and then reassembling a certain mechanical unit. The result of such an assembly may be something completely different from its prototype. Deconstruction as a postmodern principle is the requirement to change the basic values of civilization, first of all, the rejection of rationalism and science-centrism. Deconstruction realizes itself as a kind of total intellectual and ironic game with meanings.

Derrida believes that absolutely everything can be deconstructed. Due to this, the world itself, the relation of a person to the Other lose stability and certainty, become "multilayered" and interactive. The only eternal is deconstruction itself, therefore human life is eternal "being-in-deconstruction".

"Eclecticism" is not only a category of postmodern aesthetics that describes the process of creativity, the way of creating various art objects, but also mental practice in general. Eclecticism is a consciously used method of combining the incompatible, demonstrating the absence of a well-thought-out concept of creativity, emphasizing randomness, intuition and spontaneity as the main creative strategies.

"Corporeality" is one of the central categories of postmodernity, in which its non-classical character is most clearly seen. If the entire previous culture was focused on spirituality as an attributive characteristic of a person, then modern forms of philosophy and art practices depart from the idea of a person being rooted in some transcendent structures of Being and consider a person, mainly somatically, as a sensually organized body.

The modern concept of "corporality" acts as a kind of philosophical and aesthetic antithesis to the concept of "spirituality". Antique culture, for which the concept of corporality was also significant, did not know such a contrast. This, firstly, was due to the fact that the very discovery of spirituality is a historically later phenomenon, directly related to Christianity.

Secondly, ancient corporeality manifested itself as a form of harmonious and highly artistic merging with the cosmic Universe, was directly connected with the ideas of catharsis and kalocagathia. The postmodern emphasis on corporality pursues a completely different task: to present a person mainly in the mode of his sexuality, the forerunners of which were the Freudian-Nietzschean ideas, as well as the texts of de Sade and Sacher-Masoch. Sexuality in modern culture represents itself in various forms: from body art and aestheticized physicality in the films of P. Greenway to frankly outrageous forms, often associated with rough naturalism and cruelty in the sex industry.

In many ways, postmodern experience is a response to the deepest needs of modern man, who in the third millennium, with his attempts to create strong AI, powerful technological development, feels lonely, lost in a strange world that is morally, politically and environmentally polluted.

1.2.11. Analytical philosophy

Analytic philosophy represents one of the two main branches of Western philosophy. This direction is connected with the region of the British Commonwealth of Nations, the USA and Scandinavia. It became widespread in the middle of the 20th century. Analytical philosophy was formed on the basis of the British neorealism of J. Moore and B. Russell, Austrian neopositivism and pragmatism.

Analytical philosophy is characterized by criticism of pseudo-problems, scientism (connection with science) and empiricism (reliance only on facts), pragmatism (emphasis on the practical benefits of knowledge). The ideals of clarity, precision and logical are cultivated.

The origins of analytical philosophy in: the logical developments of the Stoics, Aristotle's "Analytics", the semantic ideas of the sophists, the British scholasticism of Duns Scotus and Ockham. In modern times, attention to linguistic and epistemological themes has become a hallmark of British philosophy. The continental philosophy of Europe also showed interest in the phenomenon of consciousness (R. Descartes, G. Leibniz, I. Kant).

The basis of the analytical tradition was formulated by the works of the logician Gottlob Frege, the logical-semantic analysis and philosophy of common sense by George Moore, the logical atomism of Bertrand Russell, the logical positivism of the Vienna Circle, the Lvov-Warsaw school, the philosophy of everyday language of the Oxford school, as well as the concepts of early and late L. Wittgenstein. The assassination of the head of the Vienna Circle by the Nazis in Vienna, the Anschluss of Austria and the occupation of Poland led to the emigration of representatives of analytical philosophy to English-speaking countries. Analytic philosophy has made the analysis of everyday language the subject of its research.

In XX analytic philosophy has been criticized by postmodernism. As a result, she focused on the problems of the philosophy of mind. The main representatives of the second wave of analytic philosophy were John Searle, Daniel Dennett and David Chalmers. Based on intentionality, J. Searle in the book "Rediscovery of Consciousness" (1992) showed that philosophy found itself in the position of an incorrect dichotomy, on the one hand, the world consists only of objective particles, on the other hand, consciousness has subjective experience in the first person. Both positions are correct: consciousness is a real subjective experience associated with physical processes in the brain.

This position came to be called biological naturalism. D. Dennett for the philosophy of consciousness, which would have a basis in empirical research. In his dissertation Content and Consciousness, he divided the problem of explaining the mind into the need for a theory of content and a theory of consciousness. He published a collection of essays on the content of consciousness.

D. Chalmers put forward the thesis about the difficult problem of consciousness. He distinguished between the easy problems of consciousness and the difficult problem of consciousness, which can be expressed by the question: "why does perception of sensory information exist at all?". The subject of the study was the difference between the biological work of the brain and behavior, and mental experience, which is considered separately from behavior as qualia.

In his opinion, there is still no exhaustive explanation of the differences between the two systems. He criticized the materialistic explanation of mental experience. As evidence, he put forward the hypothesis of a philosophical zombie, which is a normal person, but does not have qualia and the ability to sense.

He argues that since the existence of zombies is possible, the concepts of qualia and the ability to sense have not yet been fully explained from the standpoint of physical properties. D. Chalmers admitted that consciousness originates in any information system and took the position of pre-animism. According to this position, any physical object has consciousness.

In analytical philosophy, much attention is paid to moral and ethical issues. This is due to the shift of attention from the analysis of language to the analysis of ordinary language, where there is a significant amount of value judgments. Two approaches to the interpretation of moral and ethical statements have been identified. The cognitive approach involves the verification of statements and their reduction to material interests. The non-cognitive approach proceeds from the subjective-emotional attitude (emotivism) and obligation (prescriptivism).

The only constitutive feature of analytical ethics is the analytical style of thinking, the rejection of the metaphorical-suggestive mode of presentation. This involves a careful definition of key concepts, the identification of semantic shades of the natural language of morality, the desire for logical transparency of ethical reasoning. In Finland, the supporters of analytic philosophy were Georg Henrik von Wright and Jaakko Hintikka.

The philosophy of Australia is connected with analytical philosophy. She is represented by Arthur Prior, David Armstrong, J. J.C. Smart, Frank Jackson, John Passmore, Peter Singer, Genevieve Lloyd Lloyd), Futa Helu.

Analytical philosophy has the strongest positions in the USA. A special role in this was played by the pragmatism of Charles Sanders Pierce, William James and John Dewey, George Santayana. Analytical philosophy in the United States was formed under the influence of representatives of European neo-positivism who migrated to this country. This position was taken by Quine. He supported the thesis that philosophy and science together should strive for intellectual clarity and understanding of the world.

Quine's student at Harvard University was Saul Kripke, who became one of the most famous contemporary analytic philosophers. He was occupied with the fields of modal logic and semantics, philosophy of language, and set theory. Another student of Quine was David Lewis. He is considered one of the greatest philosophers of the 20th century as he developed the theory of modal realism.

Thomas Kuhn is known for his work in the history of science and the philosophy of science. After the rise of philosophy of mind in the analytic tradition,

the work of Hilary Putnam, Donald Davidson, Daniel Dennett, Douglas Hofstadter, John Rogers Searle, Patricia, and Paul Churchland gained prominence.

Canada has become a center for research in the field of philosophy of mind and cognitive sciences, in particular, the Center for Cognitive Sciences of the University of Western Ontario. The studies were carried out by Patricia and Paul Churchland, Zenon Pilishin and Ausonio Marras. Bas Van Fraassen, William Roseboom and Alasdair Urquhart specialize in the semantics of logic.

Hans Herzberger and William Harper study the nature of preference. John Woods explored concepts related to relevance and paradox. Charles Morgan focuses on modal logic and probabilistic semantics. Anil Gupta develops the semantics of truth and paradoxes. Paul R. Thagard of the University of Waterloo is studying the potential for cognition and coherence. Zenon Pylyshyn, a psychologist and computer scientist at the University of Western Ontario from 1964 to 1994, has made significant contributions to cognitive science.

The problem of demarcation of scientific knowledge was resolved by developing criteria for the verifiability (experimental verifiability) of scientific judgments and their falsifiability (the readiness of science to abandon outdated theories refuted by newly discovered facts). Representatives of emotivism B. Russell (1872 – 1970), A. Ayer (1910 – 1989),

R. Carnap (1891 – 1970) found that ethical and normative judgments based on religious precepts are in fact not verifiable, since the existence of God as a source of morality is not empirically provable, it is the subject of irrational faith.

The negative attitude towards the scientific status of ethics was overcome by the school of linguistic analysis (S. Toulmin, R. Hear, P. Strawson). The direction turned to everyday word usage, the usual and generally accepted combination of individual words and sentences as a reflection of moral relations in society. An increased interest in the space of natural language has formed, which is characteristic of most philosophical trends of the 20th century.

In its modern form, the analytical philosophy of consciousness is closely connected with the cognitive sciences, in particular, with logic and the theory of artificial intelligence.

Topic 1.3. Philosophical thought in Belarus

The intellectual tradition of Belarus was formed by the logistics factors of the Great Silk Road in the framework of the dialogue between the West and the East. This logistics has created the practice of interaction between the intellectual elite of Belarus and the centers of ancient philosophy located on the territory of the Byzantine Empire. The eastern part of the Roman Empire existed until1453. Its ideology was formed by the Christianity of the eastern rite.

Representative communities of Greeks were in the capitals of the Belarusian principalities. There was no exception Turov. Here the formation of K. Turovsky took place. In Polotsk, the intellectual tradition was formed by E. Polotskaya. Their predecessor was K. Smolyatich. While in Kiev at the episco-pal service, he had direct contact with representatives of the large diaspora of the Greeks of Byzantine Christian rationalism (humanism).

This direction was formed on the basis of the activities of the Alexandrian and Antioch theological schools thanks to the works of Justin the Philosopher(Martyr), Athenagoras, Tatian and John Chrysostom. The Cappadocians (Basil the Great of Caesarea, Gregory of Nyssa) integrated the ancient intellectual tradition of education into Christian rationalism. Thanks to the efforts of Gregory Palamas, Christian rationalism was transformed into Christian Orthodox humanism. In this form, it was perceived in the middle Ages in Belarus.

The high level of literacy of the population of Belarus led to the choice in favor of a model of Christian rationalism. Textual resources were viewed in the broad context of deep meanings that needed to be found through the Bible. For this reason, an important role was given to the interpretation of the texts of the Bible in the genres of allegory, parables, prayers, teachings. Such forms created an oppor-

tunity to expand the text space of the Bible. Most clearly K. Smolyatich coped with this task. He became one of the first creators of the theological culture.

K. Smolyatich was born in Eastern Belarus. He lived at the turn of the XI – XII centuries. He held the post of Metropolitan of Kiev. Several of his works have been preserved. They focus on the text of the Bible. Particular emphasis is placed on the discovery of underlying deep content that is not directly readable. The mystic land theological emphasis is connected with the consideration of the principle of predestination and its role in solving the problem of sinfulness and salvation.

Ethical topics are investigated. She focuses on condemning the abuse of material interests. Wealth should not dominate as the goal of life. Moreover, wealth should not be confused with fame. The believer has the right to it. This reasoning was focused on the educated part of society, which needed to under-stand there ship between social activity.

K. Smolyatich considers it possible, during Christian reflection, to ancient wisdom, since there one can find content acceptable for Christianity. This justification was promoted by the principle of divine predestination. K. Smolyatich developed the concept of biblical studies, according to which the advantage when working with scripture texts should be given to thefigurativeandsymbolicmethod. Thismethodallowstheuseofbiblicalstoriesin order to detect the meanings hidden in them. The text must not only be able to read, but also used to en our own spiritual world. In such circumstances, the mind gets an opportunity for intellectual work. Ethical aspects of human life are associated with faith, love, patience, mercy.

Mental abilities play a large role in strengthening faith. They need to the world created by God. Through the results of works, God himself is known. Feelings are related to faith. Their task is not cognitive. Thanks to the mind that cognizes the world, the essence of man masters the toponymy of being on Earth. The essence of life is hidden in this place name. It is visible to some, but they are not able to ad-here to it. The problem lies in their ability not only to feel the presence of God, but also to use the freedom that God has given them.

Christ gave people the opportunity to choose Grace through understanding the life path on Earth. Theo-logical discourse is displayed in the space of anthropo-logical topics.

K. Turovsky (1130-1193) took place. He was born in Turov, which was the center of the principality. There was a developed economy, education, and a struc-ture of monasteries. The city had an intense relationship with Byzantium. Cyril was born into a wealthy family. But he gave preference to spiritual activity. He held high spiritual positions. Numerous of his works have survived time. Their source is the Bible. The works are written in the genres of leg-ends, parables, mes-sages, prayers, canons. The works are well preserved due tothe fact that they were included in their publications by well-known publishers.

K. Turovsky gives believers advice on what books to read in order to streng then their inner spiritual world. He uses the dialectics of the material and the spir-itual, bodily and conscious. The body is given to man as a test. If he does not cope with this test, then he falls into the trap of pleasure. Prayers can help in this test, which create an atmosphere of dialogue with God. Parables give believers a picture of the world's smoke, which includes the life of the individual. They are instruc-tive. So, "The Parable of the Human Soul and Body" shows that all the elements of the Universe have synergy according to God's plan.

The imperfection of human behavior does not mean a lack of hope for be-lievers to attain divine grace. An important role is played by outreach. The sermons of K. Turovsky have the subject of the Easter cycle of Sundays and holidays. Each of them pursues an educational goal. In his opinion, it is impossible to mix every day and real Christianity, coming from patristics. At the same time, one must be tolerant of authentic Christianity. It synthesizes the folk tradition and the intellec-tual tradition of the ancient Greeks. Educated people are required to educate those nearby. K. Turovsky assigned an important role to priests, their education, so that they corresponded to an educated society, because even the rulers, in his words, strive for knowledge. Education requires mastery of the word, accessible writing clear mind. The main thing is to get rid of the rudeness of the language, the uncer-

tainty of the mind. Dialogue with people is facilitated by modesty and repentance, spiritual work and good deeds arising from a spiritual lifestyle.

The main thing is to convince believers to abandon sinful acts and indecent behavior in the form of drunkenness, overeating, adultery, envy, slander, usury. A right-eouslifestylerequiresrestraint,mercy,respectforpeople,fasting.Thecontentof sin includes slander, insults, condemnation, anger, quarrels, fights, jealousy, enmity, evil designs, binges, theft, robbery, robbery, murders, sorcerers, adultery.

Scholasticism was embodied in Belarus in the activities of E. Polotskaya.She was born in 1101 in Polotsk, came from a princely family. At the age she received monastic tonsure. E. Polotskaya used them as the basis of educational activity. She wanted believers to have a good heart.

Christian humanism was possible only on the basis of education. To this end, E. Polotskaya founded a convent for women and men. They created hand-written books. In church schools, children studied Greek. As subjects were rhetoric, medicine, history and poetics. E. Polotskaya contributed to the heyday of the Polotsk architectural school. With her participation, John built a temple, which became known in her honor.

Efforts have been made to integrate into the intellectual space of Western Europe. This should have been facilitated by the opening of a university in Krakow, in which a special dormitory for Belarusians and representatives of the Baltic tribes functioned. A phenomenon in the Europeanization of the Belarusian intellectual tradition was poetry in Latin. Its spokesman was N. Gusovsky. In the poem “Song of the European Bison”, he presented to Europeans a system of Belarus through its nature, features of public administration, law, and the characterization of civil society. The Italians pushed him to write a poem. He told about the presence of buffalo in the forests of Belarus during his time on the local bull fight.

Of the natives of Belarus in London, Y. Litvin proved himself. He opened a printing house in 1480, in which he published not only religious texts, but alsothe works of Aristotle. Among the books published by him are “Reflections on the XII Books of Metaphysics of Aristotle”.

The publisher was targeted at a significant Orthodox audience, primarily Orthodox stu-dents who were educated at the University of Krakow. It is possible that S. Fiolwas in close intellectual contact with the German humanist K. Celtis. He was in1489-1491 lived in Krakow. Polish researchers do not support such a hypothe-sis, but E. Nemirovsky does not exclude it.

In the XIV-XVI centuries, a model of university education of Belarusian youth was formed. Undergraduate graduated from the University of Cracow. An important source of information on the intellectual migration of the natives of Belarus within the civilization of the medieval West is typography. It has be comeameetingplaceforrepresentativesofEuropeancultures.Belarusiansopened printing houses in different cities of Europe.

Their publications have be-come the main documents of their identification. An analysis of the printing activities of the natives of Belarus showed that they published books in close con-tact with German, Czech, Italian, British masters. An example of such intercultural activity was given by F. Skorina. He was educated at the universities of Krakow and Padua. He worked in many cities in Europe, in particular in Prague.

In the XIV-XVI centuries, this issue acquired great importance. Based on the philosophy of natural law, L. Sapega implemented the methodology of a systematic approach in the field of law. Its practical expression was the Statute of the Grand Duchy of Lithuania in several editions. It was a convergence of the collective legal relations of the city and the countryside. This was especially important for privately owned cities, such as Nesvizh. The dominant of natural law turned out to be important for Belarus in the conditions of active contact in the space of its spiritual culture of various religious traditions.

The natives of Belarus F. Skorina, S. Budny, A. Volan, M. Smotrytsky, V.Tyapinsky, S. Sobol, P. Mstislavets followed this path in the 16th century. They translated the ideology of humanism into the Belarusian language. At the same time, they remained in the linguistic practices of multilingualism.

Since the end of the 18th century, Belarus has been a part of the Russian Empire. As a result of this, the natives of Belarus began to receive education at the universities of Kazan and St. Petersburg. In the direction of these universities, they had the opportunity to study at German universities. One of these students was L.I. Petrazhitsky. He is born in 1867 in the Vitebsk province. He studied at the gymnasium in Vitebsk. He continued his education at the Faculty of Law of Kiev Imperial University of St. Vladimir. Since 1890, he trained at the University of Heidelberg and at the Russian Institute of Roman law. In 1898, he was awarded the degree of Doctor of Roman Law.

At the end of the 19th century, Europe approached a new cultural quality in the form of Art Nouveau. The beginning of this era was formulated by F. Nietzsche under the name "revaluation of values." Art Nouveau adhered to a bourgeois life style. The intelligent part of Europe felt the atmosphere of the crisis of the old continent. She tried to explain this phenomenon by analyzing the features of ancient tradition and subsequent historical eras (E. Husserl, V. Dilthey, K. Jaspers and O. Spengler). It was a rational approach. The crisis of the old continent brought an era of technological progress.

Against the background of such a rational absurdity, the search for other principles of European consciousness intensified. As part of these searches, a project of intuitionism was implemented. In France, A. Bergson became its author. Of the natives of Belarus, N. Lossky developed intuitionism, after the 1917revolution he migrated to the Czech Republic. Another native of Belarus, N.Minsky, developed an applied area of a new philosophy called meonism.

N. Lossky was born in Vitebsk province. He studied at the Vitebsk classical gymnasium. He was expelled in 1887 for promoting atheism and socialist teachings. He left for Switzerland, where he attended lectures at the Faculty of Philosophy of the University of Bern (1888-1889). He was left at the university to prepare for a professor ship in the department of philosophy. In the years 1895-1899 was a teacher at the Prince Oldenburg Women's College. Since 1898 he taught at the gymnasium M.N. Stoyunina.

In 1903, he received a master's degree in philosophy for his dissertation "Basic doctrines of psychology in terms of voluntarism"; Doctor of Philosophy degree - in 1907 for the dissertation "Justification of Intuitionism".

The main philosophical treatise of N. Minsky is "In the light of conscience. Thoughts and dreams about the purpose of life" (1890) had a great socio-cultural resonance. He became one of the first ideological declarations of Russian symbolism. Speaking about the crisis of modern culture caused by the loss of a sense of meaningful existence, N. Minsky developed a new philosophy of meonism. It brought together the rational and irrational, mystical experience of the modern soul. His religious and philosophical poems "The Light of Truth" (1892) and "City of Death" (1894) continued with artistic means the ideas stated in the theoretical composition.

In the 1890s - early 1900s. N. Minsky was one of the main authors of the magazines "Northern Herald" and "New Way". In 1905, shocked by political events, N. Minsky again made a sharp turn in his convictions regarding the placeof literature in society. Dreaming of the union of the intelligentsia and the people, N. Minsky became a supporter of social democracy.

After the amnesty of 1913 (in honor of the 300th anniversary of the Romanov dynasty) N. Minsky returned to Russia, but did not stay there long and again went abroad. He was a war correspondent in France.

At the beginning of the twentieth century, Belarus was influenced by transformations in the visual arts and architecture. The main reason for the transformations in the visual arts was the search for new forms of self-preservation and self of artistic creativity against the background of the development of photography and visual technologies. There has been a tendency to move away from classical realism with its characteristic photographic reality.

In the triangle Belarus-St. Petersburg-Paris, the work of L. Bakst from Grodno, M. Chagall from Vitebsk was formed. Passing St. Petersburg, H. Sutin went from Minsk to Paris. Most attention in modern Belarus is the M. Chagall. In 1997, the memorial museum of Marc Chagall was opened in the house in which

the artist spent his childhood and youth. Its exposition contains household items from the turn of the XIX-XX centuries, archival documents, the first artwork, personal belongings of the artist and his family. Ancient exhibits for the collection were selected using a series of drawings, which M. Chagall created from memory, capturing the interiors of the parental home.

On the left bank of the Western Dvina is the second museum building – the Art Center of Marc Chagall.

Section 2. Philosophical understanding of the problems of being

Topic 2.1. Ontology and philosophy of nature

2.1.1. Ontology and philosophy of nature

Science studies objective reality through the formulation of specific research tasks. At the fundamental level of research, an important role is played by interdisciplinary systemic ideas about objective reality as nature, culture, technogenic civilization. Of fundamental importance is the question of the dynamics of objective reality in the categories of the possible and the actual, cause and effect, necessity and chance, form and content, the transformation of potential being into actual being through human participation.

Actual being is in the coordinate system of space and time. It is fixed by the observer in the coordinate system of time as a duration with a certain dynamics and direction. Thus, the largest natural system, the Metagalaxy, has a time duration of evolution of 14 billion years.

Philosophers and astrophysicists consider this evolution taking into account the dynamic balance of the dynamic diversity of this natural system. They are trying to create an evolutionary model of the complete life cycle of the universe. For this purpose, the mathematical apparatus of equations, existing scientific theories in physics, as well as observational data in astronomy are used. Against this background, philosophy is interested in the mechanism of transformation of the potential possibilities of the dynamic diversity of being with the participation of design-

ers, as well as the problem of their dynamic balance (ecology) arising from the growing dynamic diversity of ecosystems with a general trend of convergence and co-evolution of their elements.

In classical philosophy, there was a dispute between idealism and materialism about the initial principles of being. Pythagoras proposed numbers, Plato – ideas, Aristotle – form. In contrast to them, Thales offered water, Heraclitus – fire, Democritus – atoms. In questions of the study of nature, science stands on the positions of materialism. It also operates with the concept of virtual (possible) being. In physics, the term "virtual particles" is used.

Theology (religious philosophy) assigns the constructs of spiritual being, in particular God, a creative role in relation to the actual material being. The ontology was developed by the Eleatics (Parmenides, Zeno of Elea). They placed the category of being at the center of philosophical research. Subjects close to this category were dealt with by Plato and Aristotle. In German classical philosophy, this topic became the subject of Hegel's consideration. It passed into the works of K. Marx and F. Engels and began to be formulated as the main question of philosophy.

In the categories of scientific philosophy, objective reality has an essence determined by the mechanisms of self-organization. The building material of objective reality is matter (energetically saturated substance). Matter has vacuum, gaseous, liquid and solid modifications. The architecture of matter is formed by four interactions - gravitational, electromagnetic and two nuclear interactions.

Interaction and communication create an information space. Information is the most important attribute of objective reality. The dynamic balance of this reality is created by opposites that pass into each other. The reflection of the internal dynamics of dynamic equilibrium is the law of conservation and transformation of energy. It says that the quantitative indicators of the energy resources of matter are preserved through the transition of one type of energy to another type of energy.

Actual being in the coordinate system of space and time is studied by philosophy and physics from the standpoint of materialism. The key element of the study is matter (substance). For a long time, matter was separated from space (the

material physical environment), which was wrong. The modern picture of the evolutionary dynamics of matter is concretized by philosophy through the physical transformations of the Universe.

The asymmetry of matter and antimatter is to blame for these transformations, which violates the dynamic balance of the material environment and creates the effect of baryon asymmetry. This means that annihilation does not neutralize the resource of the potential existence of matter or antimatter. As a result, the dynamic balance of physical reality is disturbed by the Big Bang. From this point on, the potential being of physical reality has no constraint to generate dynamic diversity in the form of vacuum and object type structures. As cosmological models show, vacuum-type structures in the form of dark energy and dark matter dominate in the space of the Universe.

The most topical issue for modern physical sciences is the generation of an object-type substance in the form of elementary particles by a vacuum medium. In this context, string structures (string theory) and quark-gluon plasma are considered to be the initial form of matter within the boundaries of the initial stages of the evolution of the Universe. This is a super dense form of matter that existed at an early stage in the evolution of the Universe before confinement.

For 2021, in the structure of the Universe, dark energy is represented by 68.3% of matter, dark matter by 26.8% of matter, and baryonic matter by 4.9% of matter. Since the volumes of dark energy matter not limited by asymmetry and annihilation grow in the Universe, this natural system maintains a high dynamics of expansion in the space of the Universe. When describing being, the categories of movement, change, development, and evolution play a fundamental role.

F. Engels identified such basic forms of movement of actual material existence as mechanical, physical, chemical, biological, social. Subsequently, the geological form of the movement of actual material existence was updated. In the space of the Earth, all these forms of movement of the material environment are interconnected by energy and information processes.

A special block of issues of modern philosophy is focused on a systematic understanding of nature, which is regarded as an objective reality that exists independently of humanity. Nature has a material basis in the form of four states of matter. Nature is a dynamic system with its characteristic forms of movement and relative peace. Nature has significant energy resources that create sources of light, heat, electromagnetic, gravitational, nuclear orientation. Energy sources of matter are at the same time sources of information.

The energy resources of nature are in a state of dynamic equilibrium (the law of conservation and transformation of energy). Nature is structured by the concepts of mega world, macro world, micro world. Mega world is a natural environment in which the object structures of the macrocosm and microcosm are located. In astrophysics, this medium is referred to as a vacuum medium with galaxies in it. In a systemic form, it is denoted by the terms "Universe", "Metagalaxy", "cosmos". Mankind has mastered space technologies, but its main life activity is carried out within the limits of the planet Earth.

The macro world is nature within the Earth with its characteristic features of the geographic environment, biosphere, noosphere, geopolitics. The micro world is the nature of elementary particles, gravitational waves invisible to the human eye. Elementary particles are part of the mega- and macrocosm. They are the building block of object-type object structures. The function of binding elementary particles is performed by strong nuclear interactions.

Nature is the subject of study of natural (experimental) philosophy that arose in the 17th century. This philosophy translated into an applied status the concepts of nature previously developed at the conceptual level. These are the concepts of atomism, mechanism, cosmism. In the twentieth century, the concepts of neurophilosophy, cybernetics, genetic engineering, nano philosophy, tribo-fatigue, and ecology were realized. The philosophy of atomism arose in ancient times and is associated with the work of Leucippus, Democritus, Epicurus.

The idea that nature consists of atoms and emptiness is introduced. I. Newton adhered to this idea. In the twentieth century, atomism was transformed on the

basis of quantum mechanics into a branch of technical physics, which made it possible to design a nuclear reactor and find its application in energy and vehicles. The main merit in the development of the quantum theory of the atom belongs to N. Bohr and M. Planck.

2.1.2. Philosophy of space and time

The category of space reflects the features of the functioning of the three states of matter, which form the parameters of the material environment with specific properties of the gaseous, vacuum, liquid state. The space has metric, topological, physical, chemical, biological, social features.

The metric properties of space are the subject of study of Euclidean and non-Euclidean geometries. Euclid's geometry describes the metric of homogeneous space within the Earth. The geometries of Lobachevsky, Riemann describe the curved metric of space within the Universe, where gravitational factors play an important role. These geometries became the basis for the formation of cosmology.

The topological properties of space were discovered by R. Descartes. They are associated with the concepts of three-dimensionality, three-dimensionality, 3D. Object structures are denoted in the coordinate system, which makes it possible to find their topological parameters. Volume plays an important role in design, artistic creativity.

In classical philosophy, there was a discussion about the relationship between space (emptiness) and object structures. Two positions have emerged. One cultivated a substantial approach (Democritus, Newton). According to this approach, the properties of space do not depend on the presence of object structures in it. Space is only a container for object structures. As a result, the classical mechanics of I. Newton does not take into account the parameters of development and evolution of object structures.

The second position - relativistic (Leibniz, Einstein) proceeds from the fact that the properties of space and object structures are interconnected by the general dynamics of their evolution. On the basis of A. Einstein's general theory of relativity, relativistic mechanics has been developed, which is actively used in the space

branch of engineering. It involves the rejection of the concept of space as emptiness and the replacement of this representation with the vacuum characteristics of outer space. Gravity, speed, mass, energy, time (duration and intensity of processes) play an important role in these vacuum characteristics.

Object structures are treated as spatial compositions (fractals). Their building material is the material cosmic gaseous medium. The shaping of objects (stars, planets and other cosmic bodies), as well as the dynamic balance of the diversity of object structures, is determined by the gravitational dynamics of the material space environment (string theory and superstring theory).

The concept of time (life cycle, duration, directionality, irreversibility) is applicable to object structures and their dynamic spatial characteristics.

The physical properties of space indicate its materiality, since they are part of natural processes. These properties include geomagnetic features. In relation to the Earth, they are formed by its glandular core and are represented by the magnetic field and magnetic poles. The Earth's magnetic field acts as a protective screen against solar radiation and radiation unacceptable to living organisms.

The chemical properties of space are formed by the properties of its building material in the form of hydrogen and a vacuum (rarefied) medium. On the basis of hydrogen, chemical elements were synthesized, the classification of which was developed by D. Mendeleev on the basis of the law of periodicity of chemical elements. Chemical components form the content of space and object structures in the form of chemical elements, chemical and physical reactions, such as thermonuclear, and chemical compounds. The atmosphere, hydrosphere and lithosphere of the Earth have a specific chemical composition and are characterized by specific chemical metabolic reactions that reproduce the conditions of dynamic equilibrium of the biosphere.

The biological properties of space are known to science at the moment only within the Earth. They are based on physical processes (biophysics) and chemical reactions (biochemistry, organic chemistry). The space of the biosphere within the Earth remains practically unchanged in volume. Before the creation of the

noosphere by mankind, there were active processes of increasing the dynamic diversity of the biosphere in the conditions of its dynamic equilibrium.

The key role in this dynamics was played by adaptation, competitive environment (natural selection). The social properties of space at this stage of historical dynamics are formed by humanity within the Earth. The main areas of application of spatial solutions are architecture, design, logistics, communications, culture, engineering and technology, public administration, and economic activity.

Human participation in social activity brings subjective ideas in the form of architectural styles, shaping, and compositional solutions into the objective environment of the biosphere space. In its subjective ambitions, mankind has to reckon with geological factors in the spatial environment of the Earth. They are associated with the landscape features of the planet, coastline, seismicity. The concept of time is filled with important content for humanity. It is associated with the duration, direction, irreversibility of processes, defined by the system of historical coordinates in the form of the past (historical memory), present and future (futurology).

In the present historical period, humanity, based on the religious factor, uses different chronologies. Christians are counting the modern history of our time from the birth of Christ. This countdown at the time of publication of this electronic educational and methodological complex includes 2021. The remaining years of human history are classified as years that took place before our era.

Time is an economic category. Its criterion is used in various forms of remuneration, the banking sector, design and construction, in the categories of depreciation and modernization, and innovation.

Time reflects the main stages of the life cycle of an individual's body within the boundaries from birth to death. These are the periods of childhood, youth, youth, maturity, old age. They are accompanied by a rich range of relationships between children and parents, relatives, grandchildren, grandparents, great-grandchildren, great-grandparents.

The history of mankind from the moment of the key signs of tool activity is measured in two million years. The time of mankind in the parameters of the future

is made dependent on ecology, the ability to maintain the dynamic balance of social processes and avoid the threat of a nuclear catastrophe by preserving the memory of the tragic events of the two world wars, including the tragic events of the Great Patriotic War. Historical memory is an important condition for preventing military conflicts and creating conditions for minimizing risks.

2.1.3. Biosphere and Noosphere

The development of civilization is impossible without rational interaction with nature, which develops and operates millions of years. The person receives from it all necessary for life: energy, food, materials, and, no less importantly, emotional and aesthetic enthusiasm. The focus of action on human nature determines not only positive impact but also leads to negative consequences. The man is so out of balance when natural the entire global ecosystem that it started to deteriorate, losing the ability to heal itself. This effect will increase with the increasing globalization of the world economy.

The environmental factor was actually limiting people's well-being: to know and this affects the health, increases the risk of genetic faults reduces life expectancy. According to the world health organization public health is 50% dependent on lifestyle and 25% of the state of the environment.The main components of natural environment: atmosphere, hydrosphere, lithosphere, biosphere. Each of them has its constituent elements, structure and features.

Three of them – the atmosphere, hydrosphere and lithosphere – educated lifeless substances and is aralon functioning of living matter-biota – the main component of the fourth component of the environment – biosphere.Biosphere (BIOS – life, sphere of activity) – the outer shell of the Earth within which life exists. The basic element of the biosphere is. Man is the highest development of living organisms on Earth, the subject of socio-historical activity and culture.

The trend of evolution of the biosphere is: a gradual increase in total biomass and productivity; accumulation of the accumulated solar energy in the surface shells of the planet; increase the capacity of the biosphere, which manifests itself in

increasing life-forms; strengthening of some of the biogeochemical functions of the living and of waste products and the emergence of new functions; the increasing role of living matter in geological, geochemical and physical geographical processes; the complexity of the structure of the biotic turnover.

The problem of man – biosphere has two main aspects. The feasibility associated with growing depletion of natural resources of the planet that poses a lot of problems scientists search for new energy sources and the like. Socio-ecological pollution of the environment and violation of the biological balance in the system man – biosphere. But if the socio-ecological process is directed, as all evolution, then in what direction? This question is answered by the law formulated by V. Vernadsky: the biosphere will inevitably turn into a noosphere, i.e. the sphere where the human mind will play a dominant role in the development of the system "man – nature". In other words, chaotic selfdevelopment based on the natural processes of self-regulation, will be replaced by a sound strategy based on forecasting and planning principles and regulation of the processes of natural development.

A distinctive feature of the modern world is a constant increase of technological and anthropogenic loads on the biosphere. This is the reason for increasing the size technosphere regions, which are home to most of the world's population. These regions are characterized by a high level of concentration of industrial objects and population density. Scientific evidence suggests that catastrophic changes in the biosphere has happened quite regularly before the advent of man. But they took place over a long enough periods. It is known that significant changes in environmental conditions caused the disappearance of a number of types of organisms, but it saw the acceleration of evolutionary Adaptations. This happened on the principle of catastrophic jolt, according to which disaster always causes significant evolutionary change can be interpreted as a progressive phenomenon.

The acceleration phase is altered by the stage of evolution, that is, the principle of continuity and discontinuity of development of the biosphere. In our time, anthropogenic impact on the biosphere occur intensively and regularly, and expect a new acceleration of evolutionary mutations, the consequences of which we can-

not even imagine. First of all there is a problem of awareness of mankind not only on the state of the biosphere, as well as its information-management network.

Awareness of the humanity of the crisis in the biosphere and response to the global environmental crisis, which has already begun, is characterized by excessive slowness. And it threatens humanity's physical destruction. According to some estimates, we're 40-100 years old.

Topic 2.2. Philosophical understanding of the problem of development. Dialectics and synergetics

2.2.1. Dialectics and Synergetics

Dialectics is directly related to the concepts of the interconnectedness of phenomena and the universal variability of the world. Already ancient philosophers noted that the reality surrounding a person is not static, but is constantly changing. Subsequently, these views were reflected in the dialectical method of cognition.

Dialectics in philosophy is understood as the theory of development and an independent method of cognition of the world. The first shoots of the doctrine of the universal movement and the connection between phenomena in nature and society were spontaneous. The ancient Greek philosopher Heraclitus became the exponent of such dialectical views. He believed that nature is a cycle of changing events, that there is nothing permanent in the world. Conflict is the way to achieve harmony, the way of existing of everything. Movement, change and conflict don’t stop even for a moment. The famous Heraclites’ expressions are:

“You can’t enter the same river twice” and

“Everything is flowing, everything is changing”.

In Antics philosophy dialectics was understood as a way of discussion where the truth is achieved through the conflict of the opposite opinions. It is considered that the first who used the concept “dialectics” was Socrates. Aristotle considered that dialectics was the science about probable opinions; he called that part of his doctrine “the first philosophy” or “the wisdom”.

The naive views of ancient philosophers were the result of the usual contemplation of the surrounding reality. Ancient scholars had no idea about the vari-

ous forms of motion of matter, data on which became available only after centuries. The efforts of philosophers were primarily aimed at identifying the general laws that govern human thinking in its dialectical movement from ignorance to knowledge. In the Middle Ages, dialectics became a tool for discussion.

When discussing philosophical issues, scientists resorted to arguments that subsequently formed the basis of the dialectical method. However, in those days, dialectics continued to be strongly influenced by idealistic views on nature and society. The focus of consideration most often lay on the movement and development of thought, and not on different forms of matter.

At the crossroads of the second and the third millennia the humankind is going through great changes in the scientific concept of the nature, socium and structure of the conscience. Formation of the new worldview became possible due to an innovative direction of the scientific thought – synergetics. The new worldview allows a human being to begin and continue a dialogue with the nature, to create a whole picture of the world and preserve integrity of the nature (Prigogine I., Nikolis J. and Toffler O.). However, we believe, it is not sufficient.

Synergetic paradigm of the modern worldview makes it possible for a human being to restore his/her unity with the nature. In this unity “the absurd and unnatural idea of some opposition between the spirit and the matter, the man and the nature, the soul and the body.” (Engels F.)

Today synergetics is an interdisciplinary trend, exploring general patterns in various phenomena.Having emerged as a branch of physics, synergetics became a cross-disciplinary direction of science, exploring general patterns in various phenomena. Its arsenal includes such properties as integrity, nonlinearity, disequilibrium, instability, self-organization, temporality (high sensitivity to the passage of time), which have become universal tools in hands of a modern researcher in the spheres of social and humanitarian processes.

Proximate prerequisites for a synergetic interpretation of social processes come from the founders of the modern general theory of self-organization suggested by I. Prigozhin (Prigozhin: 1986, pp. 45-75) and G. Khaken (Khaken:1999, pp.

11-26). These researchers cautiously applied the ideas of nonequilibrium thermodynamics and synergetics to political science, economics and sociology, though originally these terms were developed within the framework of physics and chemistry. Modern cognition of the world – nature, socium and conscience – has been developing in the environment of upgraded fundamental principles, a thesaurus of new concepts and recomprehension of all scientific concepts extending boundaries of our conscience. The main result of evolution of scientific knowledge is a phenomenon of self-organization (Prigogine, 1984:432; Nikolis, 1986:486; Haken, 1983). Natural sciences (thermodynamics, biology etc.), cybernetics and system analysis, and recently the theory of management and catastrophe, contributed greatly to the analysis of self-organization.

A new triumph of natural sciences took place in 1967 with development of the theory of dissipative structures and the development of the essence of the evolution - the phenomena of self-organization – as "the order through fluctuations" which is observed in the least balanced area of the process. However, this modern trend has deep historical roots originating in ancient oriental and antique classical science.

Synergetics is a scientific trend, methodological approach, theory of self-organization of complex, i.e. non-equilibrium, non-linear and stable open systems through instability. In synergetics principles of evolutionism are of universal nature, therefore, they talk about evolutionary-synergetic principles. The theory of economic dynamics and social evolution, the theory and ethics of the market order, the evolutionary concept of economic progress and modelling of natural and artificial intellect are all based on these principles.

Synergetic approaches are widely used in researches of political, social and demographic systems, as well as during discussions of theoretical foundations of art, culturology etc. This indicates that synergetic methods undergoing formation lead to recomprehension of both natural and social sciences. Natural sciences are becoming more human-orientated while methods of natural sciences are used to analyse problems in humanities.

Rational natural scientific method is becoming widely used in humanities forming people's conscience. At the same time it becomes a universal language adequate for philosophy, psychology and art. Synergetics takes a new approach to self-organization of people's unity and to solution of problems of self-organisation of a human being as a being of triple nature – natural, social and conscious (spiritual). The central concept of synergetics is self-organization. In the history of science and in philosophy this category is close to the concept of "self-development", selfmovement and self-creating (creative as opposed to destructive) natural, humane or even "divine" power.

Synergetic develops a new image of the open system. The concept of a system is not always a specific spatial-time related structure the performance of which is determined by its exchange of energy, weight and information with the environment. The system is a certain multitude of coherent, dynamic and interactive processes, which has its own dynamics in time as global complex structure. Complexity of the system may be at the structural or functional level. If structural complexity is determined by increased number of interrelated subunits, by interlinks, changes in density of probability of intensity of interrelations of subunits, then functional complexity is determined by the structure and the essence of the system.

The way to sustainability goes through development of the system of internal fluctuations of spatial-time related instabilities called dissipative structures. A paradoxical combination is observed: chaos of order and order of chaos. Transfer from one level of such hierarchical complexity to another is not spasmodic but evolutionary. It disseminates and conserves generated energy. Therefore, the principle of openness is not limited by comprehensive exchange.

Openness is establishment of communicative relations as an evolutionary element and existence of a creative element. Symmetry of the status during the process is violated unequivocally, and a threshold of instability will be established. One or more fluctuations begin "pulling" the system which became "active" as a result of conjugations and interrelations. Increasing power of this attraction is conditioned by the development of a strange attractor as the basis of localised fluctua-

tions into some spatial-time related organisation (fractal). These sporadic roamings are particularly “viable”.

Section 3. Philosophical Anthropology

Topic 3.1. The problem of man in philosophy and science

3.1.1. Philosophy of man

The section that studies human problems is called "philosophical anthropology". Historically, it took shape in the philosophical traditions of India, China and the Mediterranean. In Indian philosophy, man is the main subject of study.

The main goal of philosophy is seen in suggesting to a person ways to maximize the use of the body's resources (yoga). Also, a person is offered ways of spiritual life in harmony with nature (Jainism) and through Nirvana (the eightfold path) – Buddhism.

In Chinese philosophy, the spiritual balance of an individual is associated with the observance of cultural tradition (Confucianism), non-action (Taoism) and strict laws (Legalism). An important role is given to the identity of the male and female principles (yin and yang). The philosophical anthropology of Buddhism acquired new cultural forms in China. Through China, it spread to Korea and Japan. In ancient philosophy, Protagoras was one of the first to focus on man.

The turn to the problems of man is also associated with Socrates. Christian anthropology proceeds from the principle of anthropocentrism. According to this principle, God completed the creation of the world with man. Secular anthropocentrism is called humanism. It was formed during the Renaissance. It manifested itself in the visual arts and poetry, as well as in the social utopias of T. Campanella and T. Mora. Applied orientation to humanism was given by natural law.

I. Kant in the 18th century formulated a number of questions about man. He answered them in such writings as the Critique of Pure Reason, the Critique of Practical Reason, and the Critique of the Aesthetic Judgment. L. Feuerbach adhered to the positions of philosophical anthropologism. Under his influence were

representatives of Marxism (K. Marx, F. Engels). They consider a person as the totality of all social relations, as a person.

Based on the theory of Charles Darwin, Marxism developed the doctrine of the origin of man in an evolutionary way from higher primates. The decisive factor in this evolution was tool activity and social forms of organization of people's life. This hypothesis is consistent with the data of anthropology and archeology. Most of all, F. Engels paid attention to the issues of human evolution, who wrote the essay “The Role of Labor in the Process of Transforming Apes into Humans”.

Representatives of the philosophy of life (F. Nietzsche) consider a person on the basis of the teachings of Ch. Darwin. Representatives of existentialism (S. Kierkegaard, A. Camus, J.P. Sartre) are focused on the existence of the individual in borderline situations of choice between life and death. Existentialism actually formed the basis of Russian literature of the golden age. These are the works of F. Dostoevsky, N. Ostrovsky, L. Tolstoy. Pragmatism has concentrated on the pragmatic aspects of the life of a modern person (C. Pierce). Personalism (N. Berdyaev) connected the essence of man with his special spiritual status. This status contains guarantees of a sustainable life, but subject to the observance of Christian commandments.

Psychoanalysis (Z. Freud, C. G. Jung) concentrated on a person in aspects of his psyche and consciousness. Philosophical anthropology (M. Scheler) generalized the classical period of philosophical reflection on the theme of man. Feminism and gender issues play an active role in modern philosophical anthropology. Another aspect of research is related to the theory of artificial intelligence and transhumanism. The prospects of human evolution in conjunction with technical devices are discussed.

Applied human philosophy is connected with medical ethics, which proceeds from the principle of medical practice “Do no harm”. In this context, the legal aspects of euthanasia (the right to voluntary death due to an incurable disease) are being actively discussed. The verdict on the incurability of the patient is made by the attending physician. But there must be a legal basis for euthanasia. Other-

wise, a doctor who has given a lethal injection to a patient falls under an article that interprets his actions as premeditated murder.

The theme of natural human death is the subject of thanatology. This topic is associated with biomedical research. The legal component also plays an important role here, since police officers (police) must establish the causes of death in each specific case. For this purpose, anatomical diagnostics can be carried out by means of an autopsy in the morgue and the issuance of a conclusion on the causes of death. Similar practices are used in the investigation of the causes of death in industrial accidents, traffic accidents, air crashes, shipwrecks, as well as in the process of investigating murders and terrorist crimes.

In the philosophical tradition of industrial civilizations, the theme of man retains a special semantics, since these civilizations are local in space and time, despite the appeal of philosophers to ancient and oriental heritage. When considering the phenomenon of man in these civilizations, in addition to religious determinism, Darwin's evolutionary theory, the values of humanism and human rights, technological determinism are taken into account.

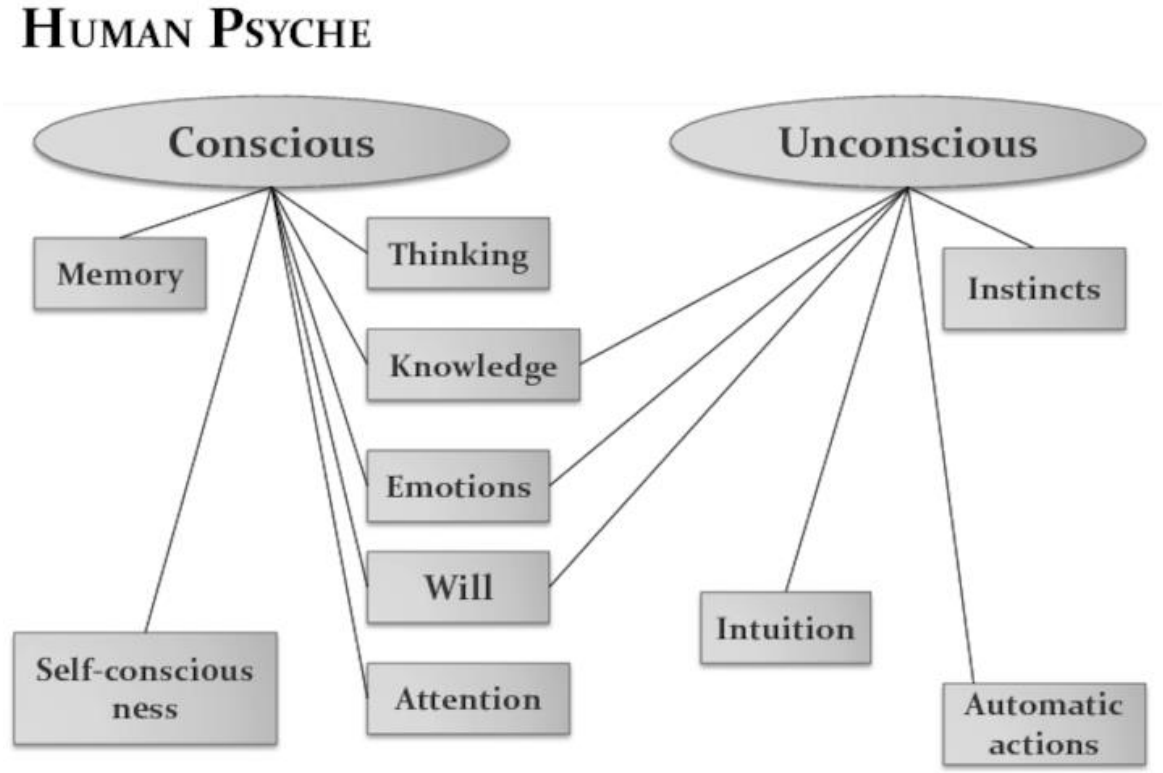
Topic 3.2. Human consciousness as a subject of philosophical analysis. The problem of artificial intelligence

3.2.1. Philosophy of consciousness

Consciousness studies have rapidly developed in the last three decades; many philosophical and scientific theories of consciousness have been proposed. However, it is far less clear how such theories of consciousness are related to each other. Some theories target different aspects of consciousness; some theories address the same aspect of consciousness but with different methodologies. Questions about the nature of conscious awareness have likely been asked for as long as there have been humans.The words “conscious” and “consciousness” are umbrella terms that cover a wide variety of mental phenomena.

Both are used with a diversity of meanings, and the adjective “conscious” is heterogeneous in its range, being applied both to whole organisms – creature con-

sciousness – and to particular mental states and processes – state consciousness. Consciousness is the highest level of mental reflection of reality and self-manifested ability of the person to give himself clear of odd about the environment, about the present and past time to make decision and according to the situation to control his behavior.



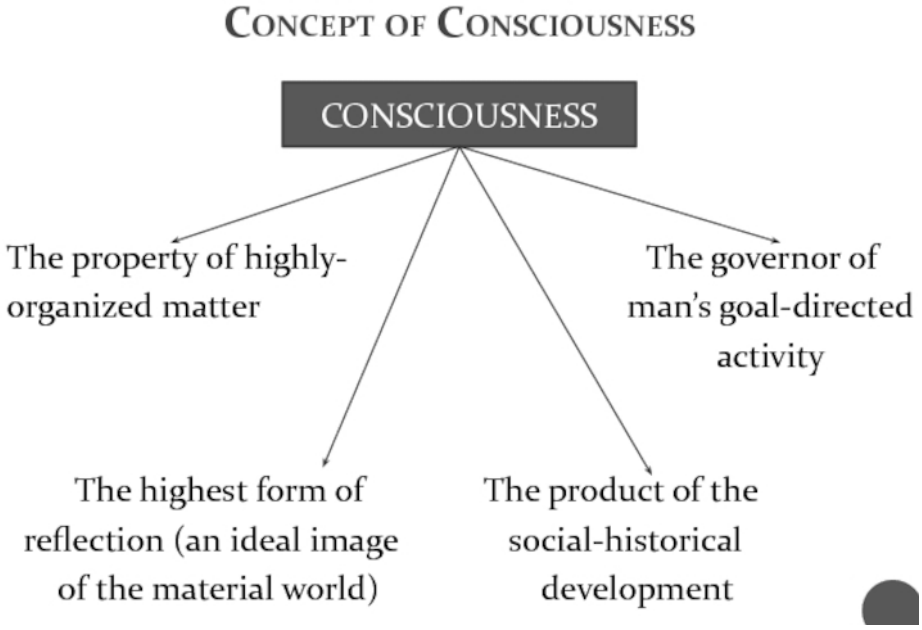
THE STRUCTURE OF CONSCIOUSNESS

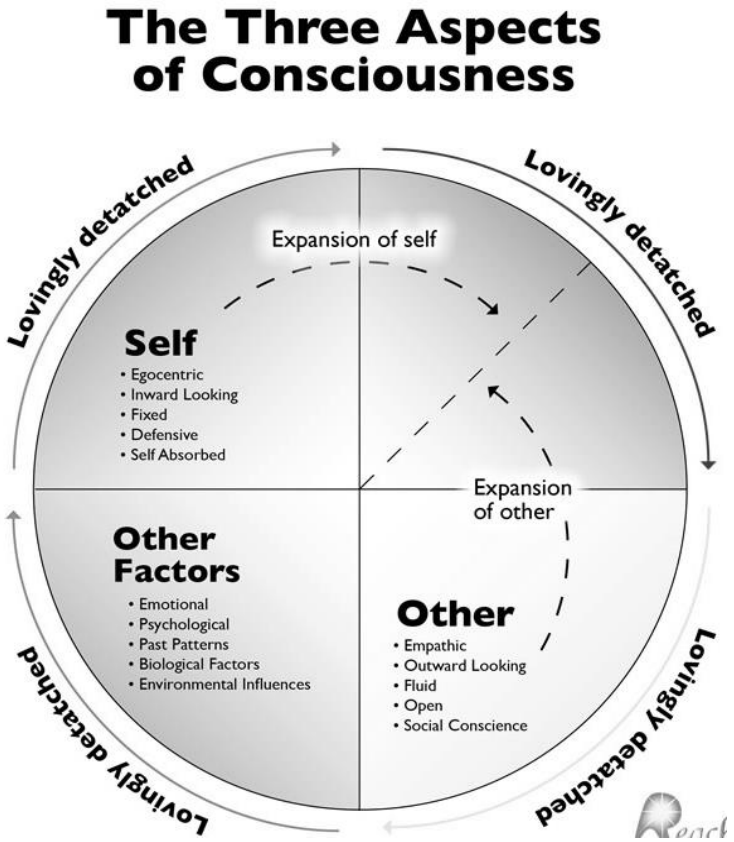
Sensuous-emotional component

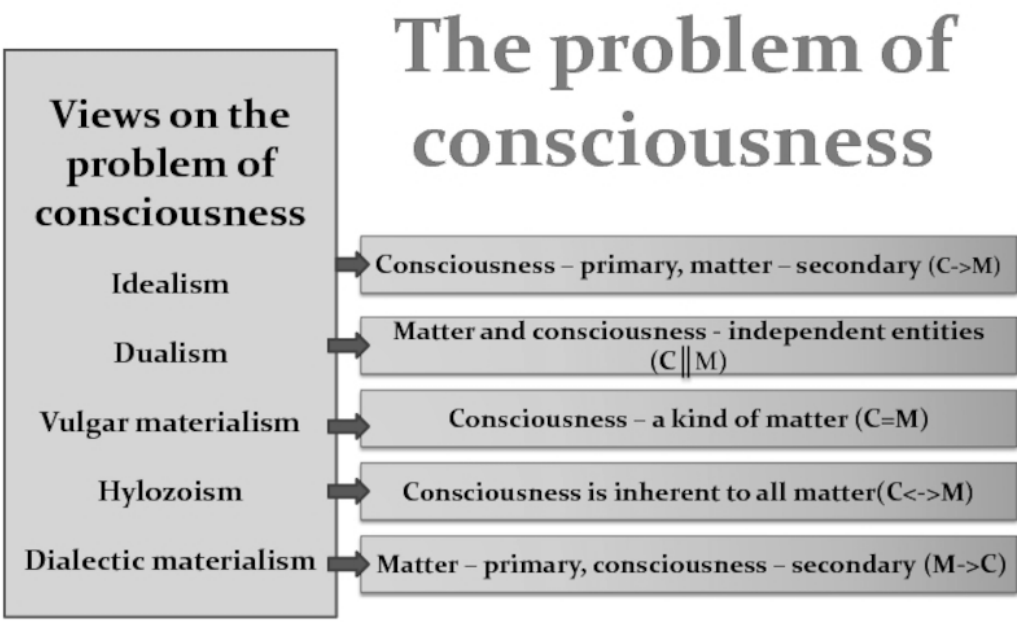
Emotional-volitional component

Abstract-logical component

Psychological characteristics of consciousness. Psychological characteristics of consciousness include:“consciousness”, i.e. the totality of knowledge about the world around us. The distinct distinction between subject and object. That which belongs to the "I" of man and the "not-I" ego.Ensuring goal-setting human activity. The presence of emotional assessments in interpersonal relationships.







The philosophical-realistic direction in understanding the sources of consciousness identifies the following factors:The external objective and spiritual world; natural, social and spiritual phenomena are reflected in consciousness in the form of concrete sensory and conceptual images. Socio-cultural environment, ideas, social ideals, ethical and aesthetic attitudes, legal norms, knowledge, means, methods and forms of cognitive activity.

This allows the individual to see the world through the eyes of society. The spiritual world of the individual, his own unique experience of life and experiences. Even in the absence of external interactions, a person is able to rethink the past, make plans, etc. The brain as a macrostructural natural system that provides the General functions of consciousness at the cellular and tissue level of matter organization. The source of consciousness is probably the cosmic information and semantic field, one of the links of which is the human consciousness.

Idealistic philosophy interprets consciousness as something independent of the objective world and creating it. Objective idealism (Plato, Hegel, etc.) turns consciousness into a divine, mysterious entity, separated from both man and nature, seeing in it the primary basis of all things.Materialism understands consciousness as a reflection of reality and connects it with the mechanisms of higher nervous activity. The pre-Marx materialists interpreted man as a natural, biological being, and turned consciousness into a passive contemplation in the world.

Being is a philosophical concept that denotes the objective world, matter, that exists independently of consciousness. Considering the materiality of the world and its being as identical concepts, dialectical materialism rejects the idealistic idea of being as existing before or independently of matter, as well as idealistic attempts to derive being from the act of consciousness.

On the other hand, it is not sufficient to emphasize only the objectivity of being, since in this case the question of the material or ideal nature of being remains unclear. While recognizing being as primary and consciousness as secondary, dialectical materialism nevertheless treats consciousness not as a passive reflection, but as an active force that influences being.Consciousness and being are the most general philosophical categories, the interpretation of which depends on the solution of the main question of philosophy.

There are various historical and philosophical interpretations of the problem of consciousness. Depending on which worldview was dominant in a particular era, the understanding of consciousness also changed.

Philosophers and naturalists have always been concerned about the sources of consciousness. Different strategies of his research have developed: realistic, objective-idealistic, phenomenological, vulgar-materialistic etc. The vulgar-materialistic trend reduces consciousness and thinking to material changes. In the end, the nature of thinking is determined by food, which affects the brain and its work through blood chemistry.The opposite approach, the collective idealistic approach, defines consciousness as independent of the brain, but determined by a spiritual factor.

3.2.2. Consciousness and artificial intelligence

Artificial intelligence is an engineering development that aims to create an analogue of human consciousness in the format of thinking (intelligence). Why was this format chosen, because it is formalized through logic into the language of mathematical logic and inference rules, as well as into logical operations, which became the basis for information technology and computer science (information

theory). The development of computer programs with signs of artificial intelligence is based on the principle of feedback and dialogue between a computer program and social network clients. The digital language of a computer program is associated with the syntax, semantics and pragmatics of natural languages due to the achievements of semiotics (the science of sign systems). One of the hallmarks of artificial intelligence is feedback. It shows how a particular computer program adequately conducts a dialogue in the form of a question and answer and whether it is capable of independent learning.

Computer programs with the functions of weak and strong artificial intelligence are integrated into technical devices and technical complexes. It can be a machine with numerical software. It can be robots, autonomous aircraft, driverless taxis. As part of a systematic approach, the strategy of the Internet of things and such areas as big data and machine learning are being implemented.

In this context, automated systems for collecting, processing, storing data and making decisions have been developed and implemented in the energy and industry. Man is present in these systems as an operator. Features of human-machine interaction in professional conditions are studied by ergonomics and engineering psychology. Centers for data processing and control of technical parameters of systems, as well as timely payment by customers for services (single centers for calculating and controlling payments for utilities, electricity, water) have been created. For this purpose, digital peripherals of sensors and counters are used.

In digital logistics, marketing and management, voice assistants, consultants, virtual influencers are used to carry out a dialogue with current and potential customers, prepare decision-making through data and information processing, and implement advertising strategies in the field of trade.

For these purposes, neural networks, deep machine learning, pattern recognition, expert systems are used. The trend has been the convergence of classical and digital devices and technologies. This can be seen in the technological evolution of mobile phones. They have become multifunctional devices for communication,

banking, photography, television, libraries, show industry, quick access to transport, logistics and tourism services, search engines.

There is a special direction in the use of artificial intelligence in systems engineering. It is associated with the strategies of the fourth industrial revolution called "Industry 4.0", "Industry 5.0" and "smart industry". Digital transformations are taking place in logistics and marketing, as well as in corporate structures. Their result was the economy of digital platforms, digital ecosystems and metaverses.

Another direction in the development of artificial intelligence technologies has become the development of invasive and non-invasive neural interfaces. These devices play an important role in restoring the coordination of patients after a stroke, and they are also important for people whose brains are affected by Alzheimer's disease. Neural interfaces are used by managers to quickly respond to business information.

Whatever characteristics are used under the term "artificial intelligence" in the strict sense of the word, while we are talking about computer programs that can imitate individual signs of human consciousness, mainly in the aspect of logical thinking. The real risks for humans will come from artificial intelligence when developers reach the technological singularity. This is the point of no return to the old models of human-machine interaction.

At present, the developers of artificial intelligence are focused on modernizing its digital periphery not only in the form of sensors, but also in the form of computer vision, as well as virtual and augmented reality. These technologies are especially in demand in the game industry and in the space of the metaverses.

Artificial intelligence technology involves hardware in the form of special equipment that creates conditions for communication, an operating system and a software system. These systems make the computer a functional device integrated with server center hardware and digital ecosystems.

3.2.3. Public and individual consciousness

Public consciousness functions in the form of a historically emerging semantics, which reflects the peculiarities of people's perception of the surrounding reali-

ty, the essence of being, the search for forms of dialogue with the fundamental foundations of being through mythology, astrology, and religion. People also historically came to certain normative institutions of social consciousness, represented by taboo, religion, morality, law, technical norms. Together, all these components of the semantics of social consciousness function as a worldview. In its structure, logical and psychological components are distinguished. The local features of these components are reflected in the concepts of mentality and identity.

The bearer of individual consciousness is a separate person. This consciousness is formed in the process of socialization under the influence of the communicative environment of family institutions, education, social networks and historical memory. In the process of socialization, individual consciousness is integrated into the space of a specific social consciousness and falls under the influence of its institutions, but only if it is sane. Carriers of individual consciousness who do not meet the sanity criteria are treated in special medical centers.

But even a sane state does not guarantee complete identity of individual and social consciousness. An example is deviant behavior. It may contradict the deeds and actions of the norms of morality and law. Since the rules of law imply a legal sanction, the acts of deviant behavior receive a legal assessment in accordance with national legislation. Actions such as terrorism and drug trafficking are subject not only to national legislation, but also to international law.

Important for the individual consciousness is the statement that says that ignorance of the laws does not exempt from responsibility. Violation of technical norms, as well as norms of scientific ethics and ethics of business relations, has a legal reference to the legislation relating to labor protection, intellectual property, the fulfillment of tax obligations, and the resolution of economic disputes. From a legal point of view, the relations of public and individual consciousness are regulated in the Constitution of the state through the concept of the rights and obligations of individual consciousness, as well as through the obligation of the national legal system to monitor their observance.

An important role in the structure of public consciousness is played by the spiritual component of the collective life of people, which exists in the form of tradition. Christian traditions play an important role in Belarusian society. Globalization and the migration of the population connected with it actualized the theme of preserving spiritual traditions.

In North America, the beginning of the spiritual tradition was laid by the Protestant and Catholic communities who arrived on the continent. As M. Weber showed, Protestants in their understanding of man were guided by the Bible and work ethics, which performed the normative function of shaping their way of life. The Protestant work ethic manifested itself in pragmatism. C. Pierce became the founder of this philosophy. It focuses on the conditions for success. These include benefit, belief in success, usefulness. From pragmatism it follows that the individual must be integrated into the activity. He is given recommendations on how to succeed and shape a lifestyle.

The Belarusian industrial model of public consciousness is focused on the efficient use of agricultural and industrial infrastructure based on strict adherence to technological discipline and building logistics. This orientation towards economic independence is based on the pragmatism of national interests.

Features of individual and social consciousness have become the subject of study of behavioral economics, which forms the basis for the development of marketing strategies.

Section 4 Social Philosophy

Topic 4.1. Society as an evolving system

4.1.1. Philosophy of society

Social philosophy is the study of questions about social behavior and interpretations of society and social institutions in terms of ethical values rather than empirical relations. Social philosophers place new emphasis on understanding the social contexts for political, legal, moral, and cultural questions, and to the devel-

opment of novel theoretical frameworks, from social ontology to care ethics to cosmopolitan theories of democracy, human rights, gender equity and global justice.There is often a considerable overlap between the questions addressed by social philosophy and ethics or value theory.

Other forms of social philosophy include political philosophy and jurisprudence, which are largely concerned with the societies of state and government and their functioning. Social philosophy, ethics, and political philosophy all share intimate connections with other disciplines in the social sciences. In turn, the social sciences themselves are of focal interest to the philosophy of social science. The philosophy of language and social epistemology are subfields which overlap in significant ways with social philosophy.

A society is a group of individuals involved in persistent social interaction, or a large social group sharing the same spatial or social territory, typically subject to the same political authority and dominant cultural expectations. Societies are characterized by patterns of relationships (social relations) between individuals who share a distinctive culture and institutions; a given society may be described as the sum total of such relationships among its constituent of members.

In the social sciences, a larger society often exhibits stratification or dominance patterns in subgroups. Societies construct patterns of behavior by deeming certain actions or speech as acceptable or unacceptable. These patterns of behavior within a given society are known as societal norms. Societies, and their norms, undergo gradual and perpetual changes.

In so far as it is collaborative, a society can enable its members to benefit in ways that would otherwise be difficult on an individual basis; both individual and social (common) benefits can thus be distinguished, or in many cases found to overlap. A society can also consist of like-minded people governed by their own norms and values within a dominant, larger society. This is sometimes referred to as a subculture, a term used extensively within criminology.

More broadly, and especially within structuralist thought, a society may be illustrated as an economic, social, industrial or cultural infrastructure, made up of,

yet distinct from, a varied collection of individuals. In this regard society can mean the objective relationships people have with the material world and with other people, rather than "other people" beyond the individual and their familiar social environment. Social stratificationSocial stratification is a term used in the social sciences to describe the relative social position of persons in a given social group, category, geographical region or other social unit.

It derives from the Latin stratum (plural; parallel, horizontal layers) referring to a given society's categorization of its people into rankings of socioeconomic tiers based on factors like wealth, income, socia status, occupation and power. In modern Western societies, stratification is often broadly classified into three major divisions of social class: upper class, middle class, and lower class. Each of these classes can be further subdivided into smaller classes (e.g. "upper middle"). Social may also be delineated on the basis of kinship ties or caste relations.

4.1.2 Economic philosophy

The philosophy of economics concerns itself with conceptual, methodological, and ethical issues that arise within the scientific discipline of economics. The primary focus is on issues of methodology and epistemology – the methods, concepts, and theories through which economists attempt to arrive at knowledge about economic processes. Philosophy of economics is also concerned with the ways in which ethical values are involved in economic reasoning – the values of human welfare, social justice, and the tradeoffs among priorities that economic choices require.Economic reasoning has implications for justice and human welfare; more importantly, economic reasoning often makes inexplicit but significant ethical assumptions that philosophers of economics have found it worthwhile to scrutinize. Finally, the philosophy of economics is concerned with the concrete social assumptions that are made by economists.

Philosophers have given attention to the institutions and structures through which economic activity and change take place. What is a market? Are there alternative institutions through which modern economic activity can proceed? What are

some of the institutional variants that exist within the general framework of a market economy? What are some of the roles that the state can play within economic development so as to promote efficiency, equity, human well-being, productivity, or growth? The dimension of the philosophy of economics that falls within the philosophy of science has to do with the status of economic analysis as a body of empirical knowledge.

Primary questions include: What is economic knowledge about? What kind of knowledge is provided by the discipline of economics? How does it relate to other social sciences and the bodies of knowledge contained in those disciplines? How is economic knowledge justified or evaluated? Does economic theory purport to offer abstract theories of real social processes – their mechanisms, dynamics, and institutions? What is the nature of economic explanation? What is the relationship between abstract mathematical models and theorems, on the one hand, and the empirical reality of economic behavior and institutions, on the other? What is the nature of the concepts and theories in terms of which economic beliefs are formulated? Are there lawlike regularities among economic phenomena? What is the status of predictions in economics?

Philosophers are not empirical researchers, and on the whole they are not formal theory-builders. So what constructive role does philosophy have to play in economics? There are several. First, philosophers are well prepared to examine the logical and rational features of an empirical discipline.

How do theoretical claims in the discipline relate to empirical evidence? How do pragmatic features of theories such as simplicity, ease of computation, and the like, play a role in the rational appraisal of a theory? How do presuppositions and traditions of research serve to structure the forward development of the theories and hypotheses of the discipline? Second, philosophers are well equipped to consider topics having to do with the concepts and theories that economists employ – for example, economic rationality, Nash equilibrium, perfect competition, transaction costs, or asymmetric information. Philosophers can offer useful analysis of the strengths and weaknesses of such concepts and theories – thereby helping prac-

ticing economists to further refine the theoretical foundations of their discipline. In this role the philosopher serves as a conceptual clarifier for the discipline, working in partnership with the practitioners to bring about more successful economic theories and explanations.

So far we have described the position of the philosopher as the underlaborer of the economist. But in fact, the line between criticism and theory formation is not a sharp one. Economists such as Amartya Sen and philosophers such as Daniel Hausman have demonstrated that there is a very constructive crossing of the frontier that is possible between philosophy and economics; and that philosophical expertise can result in significant substantive progress with regard to important theoretical or empirical problems within the discipline of economics. The cumulative contents of the journal Economics and Philosophy provide clear evidence of the productive engagements that are possible when philosophy meets economics.

In order to accomplish these goals, the philosopher of economics has a responsibility parallel to that of the philosopher of biology or philosopher of physics: he or she must attain a professional and rigorous understanding of the discipline as it currently exists. The most valuable work in the philosophy of any science proceeds from the basis of significant expertise on the part of the philosopher about the best practice, contemporary debates, and future challenges of the discipline. Only through such acquaintance will the philosopher succeed in raising topics that genuinely engage with important issues in the profession.

4.1.3. Culture and civilization.

The term ‘culture’ is a Latin origin of the world ‘cultus’, which refers to cultivating or refining something, in such a way that it provides admiration and respect. In finer terms, culture is the way people live, reflected in the language they spoke, food they eat, clothes they wear and the Diety they follow or worship.

It expresses the manner in which one thinks and do things.In other words, culture is the set of knowledge, experiences and behaviors which is commonly shared by a group of people. It is something that a person gains through learn-

ing.Culture includes art, knowledge, belief, customs, traditions, morals, festivals, values, attitudes, habits and so on which are inherited by a person as a member of society. It is everything; an individual achieves as a member of a social group.

It can be seen in the literature, music, dance forms, religious practices, dressing style, food habits, ways of greeting others, recreation and enjoyment. Different cultures can be found in different places, as it varies from region to region.

Civilization is described as a process of civilizing or say developing the state of human society, to the extent that the culture, industry, technology, government, etc. reaches the maximum level. The term ‘civilization’ is derived from a Latin term ‘civis’ which indicates ‘someone who resides in a town’. The term ‘civilization’ is not confined to town; rather it talks about adopting better ways of living, and making best possible use of nature’s resources, so as to satisfy the needs of the group of people. Further, it stresses on systematising society into various groups that work collectively and constantly to improve the quality of life, regarding food, education, dress, communication, transportation, and the like. Key differences between culture and civilization. The following points are noteworthy, so far as the difference between culture and civilization is concerned:

1. The term ‘culture’ refers to the embodiment of the manner in which we think, behave and act. On the contrary, the improved stage of human society, where members have the considerable amount of social and political organisation and development, is called Civilization.

2. Our culture describes what we are, but our civilization explains what we have or what we make use of.

3. Culture is an end; it has no measurement standards. As against this, civilization has precise measurement standards, because it is a means.

4. The culture of a particular region can be reflected in religion, art, dance, literature, customs, morals, music, philosophy, etc. On the other hand, the civilization is exhibited in the law, administration, infrastructure, architecture, social arrangement, etc. of that area.

5. Culture denote the greatest level of inner refinement, and so it is internal. Unlike, civilization which is external, i.e. it is the expression of state of the art technology, product, devices, infrastructure and so forth.

6. Change in culture is observed with time, as in the old thoughts and traditions lost with the passage of time and new ones are added to it which are then transmitted from one generation to another. On the flip side, civilization is continuously advancing, i.e. the various elements of civilization like means of transportation, communication, etc. are developing day by day.

7. Culture can evolve and flourish, even if the civilization does not exist. In contrast, civilization cannot grow and exist without culture.

Therefore, one should not confuse culture for civilization. However, both are created by human beings and expresses, the way we led our lives. These two gives us the ideas, ideals, values and ways to live a decent and lavish life.

4.1.4. Philosophy of law, aesthetics, ethics

The subject of study of the philosophy of law is the legal consciousness, the legal creativity of people, the institutional environment of law and the application of legal norms. The harbinger of law was the institution of taboo. He introduced the practice of prohibitions on certain actions. Legal norms did not have a written reflection before the rise of civilizations.

They were part of the customs of the peoples. The status of legal powers was possessed by some democratic institutions of traditional society, for example, the meeting of citizens of the ancient policy, the people's council.

With the formation of world religions (Christianity, Islam), the formation of canon law took place. For Christians, the basic legal norms are set out in the Bible, for Muslims – in the Koran. The main institution of legal application on behalf of God in the Catholic Europe of traditional society was the institution of the Inquisition. It included capital punishment in the form of burning at the stake. Such punishments were cultivated until the end of the 17th century. A native of Belarus, Kazimir Lyshchinsky from Brest, went through quartering and burning at the

stake. He was executed in Warsaw. The reason for the punishment was the slander of a neighbor. He did not want to return the money debt.

During the Renaissance, natural written law became widespread. It had a systemic character and included all types of law (civil, criminal, economic, state). This right was developed by lawyers who received higher legal education at universities in Europe. The achievement of the legal culture of Belarus was the Statutes of the Grand Duchy of Lithuania, Russia and Zhemoytsky. Lev Sapega was the coordinator of this project.

State law has become the subject of reflection within the framework of the social contract theory. One of the developers of this theory was T. Hobbes. He was convinced that people naturally came to the need to create a state and delegate a number of powers to officials. But with this transfer of functions, there were risks of corruption. It is possible that individual officials may use their administrative position for selfish purposes. Therefore, anti-corruption legislation has become relevant. There is also anti-corruption legislation in the Republic of Belarus.

The activity of destructive forces, which is associated with terrorism and poses a direct threat to the lives of citizens, has also become a subject of law. Destructive forces are under the influence of inhumane ideologies. One of these ideologies is neo-Nazism. This is a modern modification of the ideology of fascism. In the middle of the twentieth century, the ideology of fascism was characteristic of a number of European states, in particular, it became the state ideology in Germany.

The German invaders not only carried out the genocide of the Belarusian people, but also contributed to the transition of the nationalist organizations of Eastern Europe to the ideological platform of fascism. Members of these organizations participated in the punitive operations of the German occupying army against the Belarusian population in 1941-1944. In the Republic of Belarus, with the participation of the Prosecutor General's Office, a systematic investigation of the crimes of the German occupiers and their accomplices against the civilian population is being carried out. The collected documents, as well as the discovered places of mass executions by the German invaders of the Belarusian population in

1941-1944, give grounds to define the actions of the German invaders as genocide of the Belarusian people.

In the conditions of the fourth industrial revolution, a number of questions arose before the philosophy of law. They concern the legal regulation of the Internet and the digital economy. With the transition to the space of the digital economy of the main segments of activity, cyber risks and threats have grown, which require a legal assessment, as well as legal measures to reduce cyber crime in the forms of drug trafficking, phishing and hacker attacks. A system of legal laws has been developed that regulates the functioning of the institutions of the digital economy, as well as legal responsibility in social networks.

Aesthetics has been transformed into a design philosophy. It regulates the design and construction activities in order to give them requirements associated with the increased aesthetic demands of consumers and users of technical devices. An important role is played by architectural and landscape design. In the digital economy, the role of computer design is growing, which determines the attractiveness of information sites and advertising. The green economy has driven the development of biodegradable packaging design. In this context, aesthetics and design are based on research in the field of bionics.

The main categories of aesthetics include the beautiful and the ugly, the sublime and the base, the tragic and the comic. An important role is given to the concepts of style, composition, aesthetic taste.

Digital ethics can be defined as a science that generalizes, systematizes the principles and norms of human morality that operate in a digital society. Fundamental for the issues of digital ethics are the works of the professor of the Massachusetts Institute of Technology N. Wiener, who developed the methodology and strategy for the ethical use of automata and computing systems, put forward the key ethical principles and values of our time.

The scientist predicted that after the Second World War there would come an automated age with huge potentials for evil and good, which would produce many new ethical problems. Among them are computers, security, unemployment,

responsibility, computers for the disabled, the synthesis of machines and the human body, ethical issues of robotization and artificial intelligence. An important direction in the formation of new ethical principles is the work of D. B. Parker and D. Gotterbarn, who formulated the foundations of computer ethics and developed a code of professional conduct for the Association for Computing Machinery (ACM). Scientists are the founders of computer security. These ethical principles are of a professional nature, restraining voluntarism in the field of information and communication technologies.

A special role in the formation of digital ethics belongs to the scientist of the Massachusetts Institute of Technology J. Weizenbaum, who stated that many of the problems in the development of computer technology are of an exclusively ethical nature. An acute issue is the issue of replacing a person in certain areas of activity with computer systems. This is not only a matter of technical capability, but also of ethical legitimacy.

A special direction in the development and formation of digital ethics was set by the works of H. Nissenbaum, devoted to the problems of copyright, copying, privacy, and anonymity on the network. The increase in the volume of information, the accumulation of artifacts raises the question of their preservation. L. Floridi, considering digital ethical relations, shows that any information object has the right to remain in its status, has the right to flourish, entropy is unacceptable, it is ethical to protect this right. According to M. McLuhan, rethinking ethical principles and describing the vectors for the development of future morality is especially important for the development of digital ethics.

The speed of technological development is so high that in a digital society it is possible to quickly adopt a new moral principle both at the level of an individual and at the level of the whole community, and a person no longer experiences moral conflicts. The morality of modern man is situational and eclectic.

R. Capurro sees the solution of ethical dilemmas in the interdisciplinary and multicultural understanding of digital ethics. He elevates the digital contradictions of our time to a number of the most important ethical problems that require atten-

tion. Actual directions in the formation and development of digital ethics are the solution of moral dilemmas that arise in connection with the development and application of information technologies, consideration of alternatives for the formation of ethics of personal and social life in a digital society, overcoming problems and finding sustainable solutions necessary for adequate responses to the technological challenges of the digital age.

Real world defenses are down, society is radicalizing into echo chambers, and the tech industry is suffering from a loss of confidence. The negative effects of the global platform economy cannot be hidden: Anonymization of labor, job losses due to automation, prequalification due to the exploitation of working conditions and the formation of an oligopoly create new challenges for politics and business. Fears and fears are circulating about a transhumanist future that wants to make human labor and the individual in general superfluous and create a feudalism 2.0 in which moneyed elites undermine the democratic constitutional state.

Internet consumers are being disenfranchised as private experiences are defined by tech companies as freely available material and turned into products. Tim Berners-Lee and Tristan Harris call for new rules for web technology. The ethicist examines contemporary conventions about human action for their individual and social compatibility. There are many questions: How is digital enlightenment changing the understanding of privacy? How to ensure the autonomy, and not the exploitation of man? To what extent is the user willing to allow the transfer of privacy data?

There is a lack of value-based digital literacy in education and business, ethics for design business models, and mandatory codes for Big Data and AI. Lists of trend-setting values exist in the IT industry, academia, and at the political level. For example, the Institute of Electrical and Electronics Engineers (IEEE), Alphabet (Google), and the German Society for Informatics have codes that emphasize issues such as security, transparency, social obligations, respectful and competent development of technology, and general accountability. The EU Guidelines for

Trusted Artificial Intelligence emphasize human oversight, technical soundness and legal compliance.

The ten commandments of the German Institute for Digital Ethics emphasize the self-protection of the individual, who must reveal himself as little as possible in the screening spaces of data-hungry networks and criticize the temptations of technology. This requires digital maturity. It is a lifelong process of self-discovery and self-control in order to develop in the digital space with self-determination and knowledge of one's own abilities, but also with limitations. It is the will to master digital competencies in practice, and the ability to adopt not one's own views on digital communication. In addition to the technical skills required to use hardware and software with confidence, social, psychological and cultural skills are also important. Broad general knowledge, a high degree of abstraction in thinking and a holistic approach are needed. This meta-learning, in turn, develops personal identity and enables more informed judgment.

Digital technologies have become systemically relevant and are used at the state level, in critical security infrastructure, and in almost every aspect of everyday life. The Internet and the real world are no longer separate parallel worlds with the Internet of Things. But the algorithms that decide good and evil are in many cases unknown to users.

There is a problem with software being prone to bugs, which leads to security flaws, diagnostic errors, and biases such as racial profiling. Problematic is the inadequate documentation of technological development processes. This means that even development teams don't understand their systems 100%.

Digital maturity means understanding that there is no answer to all questions. We must learn to live with growing uncertainty in an increasingly complex world. The realization that each person is involved in a potentially manipulative system and sovereign exercise of one's own agency need not be mutually exclusive. The more knowledge a person has about the psychological insights of algorithmic logic, the better he can be outwitted. Empowerment gives users back a

sense of responsibility for making sure everything happens within their own decision-making space.

Good digitization should focus on the duty to create value in a distanced and humane manner based on proportionality. In relation to the Internet and Big Data, this means that only through the greatest possible autonomy (data sovereignty) and the proper use of human resources (data savings) can clients restore trust in the long term that digitalization contributes to sustainable well-being.

Selling a product does not require psychological manipulation. Creating sustainable value, rather than generating rapid growth and short-term profits, not only makes people happy, but also ensures the long-term survival of the company. To achieve true integrity, autonomy must be modeled, not forced by command and control. Progress should keep people in their positive self-awareness, not confuse them. For developers of technological systems, this means that they must offer increased performance subject to controlled entropy minimization.

Compliance focuses not only on legal aspects, but also on the social responsibility of their own products or services. Ethical Design adheres to legal requirements to protect the user, such as Privacy by Design of the GDPR. It also focuses on promoting the deeper social needs of the customer (sharing, information, entertainment, education, recreation, etc.) rather than focusing solely on marketing specifications that drive sales.

Clarity, simplicity and intuitive controls make it easy to navigate web interfaces. But often the focus on user impulses to action (call to action) is confused with guided action and digital nudge. Excessive feedback in the form of rewards creates false incentives. Addictive design encourages repeated consumption, which can lead to attention gaps, information overload, and addiction. It makes sense to promote the balance and focus of the consumer through intrinsic motivation in order to preserve his freedom of choice.

A calm, safe environment encourages mindfulness and creates emotional security so that the user can build trust. Rhythmic processes, including pauses and an authentic learning environment, contribute to the reduction of disruption, which

favors concentration and individual mobilization. The user is not distracted from their actual motivation and may experience long-term satisfaction instead of satisfying short-term affects. This also applies to group dynamics. Instead of creating pressure for conformity through status-oriented self-representation, a sense of shared and harmonious community should be conveyed through clearly structured and well-managed communication spaces.

An important factor is the adaptation of web interfaces, applications or online stores to regional and cultural characteristics. In this case, the emphasis is on a stronger orientation of design and product development towards the diversity of communities, rather than an artificial homogenization that does not reflect the real world. Framing one's own culture is the deciding factor in whether a customer buys a product. The variety of designs helps to avoid customer misunderstandings due to translation problems and achieve a stronger emotional attachment to the product. Intercultural learning within the organization also contributes to product development and understanding of foreign markets.

Topic 4.2. Prospects and risks of modern civilization

4.2.1. Philosophy of history

Philosophy of history is the application of philosophical conceptions and analysis to history in both senses, the study of the past and the past itself. The term was coined by Voltaire

There are different ways the word ‘history’ might be defined, so we had better start out by defining our terms. For example, you could define history as the sum total of past events. But that’s not how historians or even philosophers of history would define it. The problem with that definition is that it encompasses every single event that has so far happened in the Universe – from the big bang to the emergence of humankind and everything in between. We do sometimes talk about history in this broad and inclusive sense.

Here are some some deep questions about the past itself: Does history have a direction? Are historical events governed by fixed, unchanging laws? Or does the

fact that history is driven by human actions mean that historical events could always have gone a different way, if the main players had made different choices? And these questions about the past itself, bear directly on the study and representation of the past.

Like most branches of philosophy, its intellectual origins are cloudy, but they lie in a refinement of ‘sacred’ histories, especially those of Judaism and Christianity. The story of the Fall of Man from the Garden of Eden, as recounted and elaborated in Judaism and Christianity, preserves traces of a moral cycle. This would give the basis for theodicies which attempt to reconcile the existence of evil in the world with the existence of a God, providing a global explanation of history with belief in a coming Messianic Age.

Some theodicies claimed that history had a progressive direction leading to an eschatological end, such as the Apocalypse, organized by a superior power. Augustine of Hippo (354-430), Thomas Aquinas (1225-1274) and Bossuet (in his Discourse On Universal History of 1679) formulated such theodicies, but Leibniz (1646-1716), who coined the term Théodicée, developed the most famous philosophical theodicy.

Leibniz based his explanation on the principle of sufficient reason, which states that anything that happens, does happen for a specific reason. Thus, while man might see certain events as evil (such as wars, epidemics and natural disasters), such a judgement in fact only reflected human perception; if one adopted God's view, "evil" events in fact only took place in the larger divine plan. In this way theodicies explained the necessity of evil as a relative element that forms part of a larger plan of history. Leibniz's principle of sufficient reason was not, however, a gesture of fatalism. Confronted with the antique problem of future contingents, Leibniz invented the theory of "compossible worlds", distinguishing two types of necessity, to cope with the problem of determinism.

The first major philosopher to outline a scheme of world history was Immanuel Kant. His work “The Idea of a Universal History from a Cosmopolitan Point of View” (1784) is devoted to the analysis of history. German Idealism also

produced Hegel's Lectures on the Philosophy of World History (1837), a much longer and more ambitious attempt to make philosophical sense of the history of the world as a whole. Hegel believed history is rational, the working out, in fact, of philosophical understanding itself.

The accelerating success of natural science in the nineteenth century gave rise to a powerful combination of empiricism and logical positivism, which produced a philosophical climate highly unfavourable to Hegelian philosophy of history. The belief became widespread among philosophers that Hegel, and Marx after him, had developed a priori theories that ignored historical contingency in favour of historical necessity, and which were empirically unfalsifiable.

Popper's philosophy of science was especially influential in converting philosophy of history to a new concern with the methods of historical study rather than with the shape of the past. Two rival conceptions of historical method existed. One tried to model explanation in history on what they took to be the form of explanation in science, and argued for the existence of 'covering laws' by which historians connect the events they seek to explain. The other argued for a distinctive form of explanation in history, whose object was the meaning of human action and whose structure was narrative rather than deductive.

Cyclical and Linear History. Many ancient cultures held mythical concepts of history and of time that were notlinear. Such societies saw history as cyclical, with alternating Dark and Golden Ages. Plato taught the concept of the Great Year, and other Greeks spoke of aeons (eons). Similar examples include the ancient doctrine of eternal return, which existed in Ancient Egypt, in the Indian religions, among the Ancient Greece Pythagoreans' and in the Stoics' conceptions.

In his Works and Days, Hesiod described five Ages of Man: the Golden Age, the Silver Age, the Bronze Age, the Heroic Age, and the Iron Age, which began with the Dorian invasion. Some scholars identify just four ages, corresponding to the four metals, with the Heroic age as a description of the Bronze Age. A four-age count would match the Vedic or Hindu ages known as the Kali, Dwapara, Treta and Satya yugas. According to Jainism, this world has no beginning or end but

goes through cycles of upturns (utsarpini) and downturns (avasarpini) constantly. Many Greeks believed that just as mankind went through four stages of character during each rise and fall of history so did government. They considered democracy and monarchy as the healthy régimes of the higher ages.

In the East, cyclical theories of history developed in China (as a theory of dynastic cycle) and in the Islamic world in the work of Ibn Khaldun (1332-1406).

During the Renaissance, cyclical conceptions of history would become common, with proponents illustrating decay and rebirth by pointing to the decline of the Roman Empire. Machiavelli's Discourses on Livy (1513–1517) provide an example. The notion of Empire contained in itself ascendance and decadence, as in Edward Gibbon's The History of the Decline and Fall of the Roman Empire (1776) (which the Roman Catholic Church placed on the Index Librorum Prohibitorum).

Cyclical conceptions continued in the nineteenth and twentieth centuries in the works of authors such as Oswald Spengler (1880–1936), Nikolay Danilevsky (1822–1885), and Paul Kennedy (1945–), who conceived the human past as a series of repetitive rises and falls. Spengler, like Butterfield, when writing in reaction to the carnage of the First World War of 1914–1918, believed that a civilization enters upon an era of Caesarismafter its soul dies. Spengler thought that the soul of the West was dead and that Caesarism was about to begin.

During the Enlightenment, history began to be seen as both linear and irreversible. Condorcet's interpretations of the various "stages of humanity" or Auguste Comte's positivism were one of the most important formulations of such conceptions of history, which trusted social progress. As in Jean-Jacques Rousseau's Emile (1762) treatise on education (or the "art of training men"), the Enlightenment conceived the human species as perfectible: human nature could be infinitely developed through a well-thought pedagogy. In What is Enlightenment? (1784), Immanuel Kant defined the Enlightenment as the capacity to think by oneself, without referring to an exterior authority, be it a prince or tradition:

In a paradoxical way, Kant supported in the same time enlightened despotism as a way of leading humanity towards its autonomy. He had conceived the

process of history in his short treaty Idea for a Universal History with a Cosmopolitan Purpose (1784). On one hand, enlightened despotism was to lead nations toward their liberation, and progress was thus inscribed in the scheme of history; on the other hand, liberation could only be acquired by a singular gesture. Thus, autonomy ultimately relied on the individual's "determination and courage to think without the direction of another."

The question of progress opened up a new inquiry about Europe's singularity. It led Enlightenment thinkers and their nineteenth-century heirs to create a new chronology for European history. This chronology was deeply affected by the history of ideas: Rome's grandeur and decline were considered in terms of ideas, religious and political, affecting its fate (Montesquieu, Ferguson, Gibbon). The newly minted ‘middle ages’ were temporarily cast aside as an intellectually ‘dark’ era. And, in the hands of Jacob Burckhardt, the Italian Renaissance became a focal point for an account of Europe's intellectual and cultural renewal, its leap to a great future from the springboard of a rediscovered past.

In Marx's view of history, ‘feudal society’ with its typical ‘feudal relations of property’ and its ‘feudal mode of production’ constituted a ‘progressive economic form of society that produced a new class, the bourgeoisie, which broke down the ‘feudal barriers to production. Interpreting history from a Eurocentric perspective, Marx equates classical antiquity with a slave-holding society, the Middle Ages with feudalism, and the present times with capitalism.

This classification of history reflects Enlightenment philosophy's belief in progress and combines it with the view of history held by postrevolutionary historians and social scientists. In their view, ‘féodalité’ is a term to describe both an epoch and a society: in the linear, evolutionary course of world history, ‘féodalité’ or more exactly the ‘systèmethéologique et féodal was a link between the society of ancient slaveholders and the ‘systèmeindustriel et scientifique that produced the French Revolution.

Since Plato's Republic, civic education and instruction has had a central role in politics and the constitution of a common identity. History has thus sometimes

become the target of propaganda, for example in historical revisionist attempts. Plato's insistence on the importance of education was relayed by Rousseau's Emile: Or, On Education (1762), a necessary counterpart of The Social Contract (also 1762). Public education has been seen by republican regimes and the Enlightenment as a prerequisite of the masses' progressive emancipation, as conceived by Kant in Was IstAufklärung? (What Is Enlightenment? 1784).

The creation of modern education systems, instrumental in the construction of nation-states, also passed by the elaboration of a common, national history. History textbooks are one of the many ways through which this common history was transmitted.

The role of individual personalities in history. The question of the role of individual personalities in the process of states formation and their evolution is extremely interesting and important, it perfectly illustrates the importance of developing a theory of the role of individuals. At the same time, it is worth noting that at the origin of the formation of almost any early state or large political entity such as an analogue of an early state there is always one or another prominent person.

The role of prominent people in the process of the formation of states, the creation of religions and civilizations is well known in culture, science, inventions, etc. In this connection, it is worth pointing out the theory of the creative minority by A. J. Toynbee. It can also be said that some interesting ideas about the role of individuals in the process of formation of chiefdoms and states sometimes appear in the works of some neo-evolutionists, (Claessen; Carneiro; Miller).

There is no doubt that: a) there are many factors and reasons that determine the degree of influence of historical figures on the society; b) this influence can vary greatly depending on the circumstances.

The fewer alternatives and real opportunities the society has to choose or replace an individual (less real competition for a leader's place) and the more responsible the position of a given individual in the public hierarchy, the more important the role and the more this society depends on its personal data under the critical circumstances.

The ambiguity and diversity of the problem of the role of the individual in history requires an adequate, multilateral approach to its solution, taking into account the greatest possible number of the reasons that determine the place and role of the individual in a particular moment of historical development. The combination of these reasons is called the factor of the situation, the analysis of which allows not only to unite different points of view, localizing them and cutting their claims, but also facilitates methodically the study of a specific case, without predetermining the result of the study.

The historical person is able to speed up or postpone the solution of the urgent problems, give the solution special features, use the possibilities provided talently or foolishly. If a certain person managed to do something, it means that there were already potential opportunities for this in the depths of the society.

No individuals are able to create the great epochs if there is no accumulated conditions in the society. Moreover, the presence of a social task that is more or less relevant to the individual is something predetermined, rather random, although quite probable.

In conclusion, it can be said that, in any form of government, this or that person is promoted to the level of the head of the state, who is called upon to play an extremely responsible role in the life and development of a given society. A lot depends on the head of the state, but, of course, not everything.

Much depends on the society thart elected him, as well as on what forces carried him out to the level of the head of the state. The people are not a homogeneous and equally educated force, and the fate of the country may depend on what groups of the population turned out to be in the majority in the elections, with what measure of understanding they exercised their civic duty. One can only say: what is the people; such is the person that they have chosen.

4.2.2. Prospects and risks of modern civilization

The results of philosophical studies of the civilizational process are represented by formational, Weberian, civilizational, techno-deterministic, passionate, communicative concepts. The formational concept (K. Marx, F. Engels and V.I.

Lenin) considers the scientific and technological process, civilizational dynamics in close connection with the criteria of social justice. For these purposes, the initial idea of the formation as the unity of the basis and adjustment is introduced.

The basis fixes the specifics of economic relations between social groups. It is primary in terms of its impact on the superstructure associated with socio-political, spiritual relations between social groups (classes). In the basis lies the main contradiction of techno development, associated with the discrepancy between production relations and the nature and level of development of the productive forces of mankind. This change can be carried out through a social revolution.

Weber's concept (M. Weber) considers scientific and technological progress in the context of the religious and cultural traditions of economic pragmatism (the Protestant work ethic as an example). As a result, religion is given an important role in the civilizational process.

The civilizational concept (N. Danilevsky, O. Spengler, A. Toynbee, N. Berdyaev) considers technogenic dynamics as a living system with signs of birth, maturation, death, and competition inherent in its elements. The aspect of competition dominates in the works of the late XX – early XXI centuries. Technogenic civilizations are characterized by industrial, post-industrial, information levels of development. Since civilizations have a life cycle, they become the object of archaeological research as a result of it.

Techno-deterministic concept (E. Kapp, T. Veblen, F. Dessauer,

D. Bell) focuses on technology as a self-sufficient entity that has a decisive influence on all aspects of the civilizational process. Such a view is referred to as technocracy. However, this position is criticized, since technology is ambivalent (dual) and in relation to a person it contains both physical and organizational and managerial components. In this regard, A. Toffler analyzes the shock from the future, M. Mumford - the myth of the machine, the Club of Rome – the environmental threat posed by technocracy

Passionary concept (L. Gumilyov) enriches technogenic dynamics with synergetic processes of demographic explosions and demographic expansion, the in-

fluence of cosmic factors on the earth's world order. In the space of the Earth, superethnoi are being formed, which center the civilizational initiative on themselves and, through complementary practices, integrate ethnic groups into a single natural landscape. A similar function of a superethnos is performed by Arabs, Great Russians, Anglo-Saxons, Chinese, Indians, Spaniards.

The communicative concept (M. Buber, J. Habermas, M. Bakhtin, L. Wittgenstein) connects the essence of civilizational dynamics with dialogue, text, narrative, discourse. The technological basis of communication is formed by information technologies in the form of social networks. This is a new modification of social reality with elements of globalization.

Smart civilization can significantly change the social reality. Social philosophy is called upon to predict the possible positive and negative consequences of a remarkable phenomenon of our time – the accelerated formation of the world information space, which is characterized by the process of deterritorialization (erasure of geographical, national-cultural and other boundaries in the framework of information communications). Under these conditions, such a social problem as strengthening the sustainability of mankind due to inexhaustible diversity at the national, regional, personal levels is actualized.

Topic 4.3. Belarus in the modern civilizational process

4.3.1. Belarus in the modern civilizational process

Under the modern civilizational process, we mean social dynamics, the content of which is formed by such concepts as global turbulence, industry 4.0, the fourth industrial revolution, the new normal, digital socialization and the digital economy. Global turbulence reflects a situation similar to the Cold War period, when geopolitical ambitions dominated the notion of multipolarity and diversity of states. Under these conditions, the concepts of state independence and sovereignty, as well as historical memory, are of particular value. The tragic events experienced by Belarusians in the past allow them to appreciate the peaceful present and resist the sanctions pressure of Western states.

Industry 4.0 has become a symbol of the general trend in the modernization of modern industrial complexes. The content of this modernization was formulated by the fourth industrial revolution. This content includes such concepts as additive technologies, big data, internet of things, cyber-physical systems, digital platforms. The industry of the Republic of Belarus also has a modernization strategy.

Its goal is the smart industry. The concept of a new normality has become entrenched in the public consciousness of modern society under the influence of the epidemiological factor of the pandemic. As a result, business processes have been transformed and the forms of labor organization have changed. The role of remote forms of work has grown.

Digital socialization reflects the great role of information technology at the stages of preschool, school, university upbringing and education. Technical devices have become constant companions of different generations. They contribute to finding people in the information space, which means they create conditions for information impact on people. The digital economy is a strategy for the modernization of the agricultural and industrial and energy complexes and related logistics, marketing and management. The result of modernization will be a smart industry.

Globalization is increasingly taking the form of regional economic cooperation. The Republic of Belarus adheres to the strategy of regional integration. The Union State and the Eurasian Economic Union function with its participation. The Republic of Belarus also sees its place in the Shanghai Cooperation Organization (SCO). Regional cooperation is not limited only to the economic interests of the parties. Its basis is formed by the strategic partnership of states, as well as philosophy in the modification of Orientalism.

The natives of Belarus in different historical eras have made a fundamental start in the development of regional cooperation between the Republic of Belarus and the Eurasian states. A.I. contributed to relations with the PRC. Goshkevich (member of the spiritual Orthodox mission in Beijing) and N. Sudzilovsky-Russel. Natives of Belarus (soldiers and officers of the Soviet Army) participated in the

liberation in 1945 of the territory of China from the Japanese invaders. The Chinese people suffered enormous human losses during the Japanese occupation.

Senkovsky, Mukhlinsky, Khodko-Boreiko, Kovalevsky, Yanushkevich contributed to the development of relations with the peoples of the Middle East, Central Asia and Turkey. N. Sudzilovsky-Roussel knew the spiritual culture of India well. A similar assessment of his knowledge of Indian culture was given by the world famous Bengali poet R. Tagore. The contribution of the natives of Belarus to the creation of a common spiritual space of the Union State is great.

This contribution was created by K. Turovsky, E. Polotskaya, S. Polotsky, I. Kopievich, N. Minsky, M. Chagall, L. Vygotsky, O. Schmidt, A. Bogdanov, P. Sukhoi, Ya. Zeldovich. These are the spheres of Orthodoxy, fine arts, design activities and science, philosophy.

4.3.2. Philosophy of security

Ideally, security implies the complete absence of risks and threats. But in real social reality, risks and threats exist and are of a systemic nature. Therefore, each state seeks to formulate and adopt a concept of national security. The Republic of Belarus is no exception.

Risks have been studied most fundamentally in the economic sciences. On the basis of the mathematical apparatus of the theory of probability, a risk theory has been developed. It is used in management, marketing, logistics. Risks are insured. This type of activity is carried out by insurance companies. Insurance is one of the conditions for the technical and technological operation of devices, in particular, passenger liners, tankers, automotive equipment, as well as administrative and residential premises.

Risks are taken into account when developing business plans and projects. They are the subject of study by the analytical services of exchanges and banks. Economic risks prescribe individuals and legal entities, as well as national banks, to have a safety cushion in the form of gold and foreign exchange reserves. Of course, they are not comparable in volume.

Special emergency services monitor and minimize risks. They are also engaged in minimizing the consequences of accidents, disasters, as well as minimizing the consequences of earthquakes, floods, tornadoes, hurricanes and tsunamis. This means that risks are part of technological and natural processes.

The risks of crop failures have actualized food security. It assumes the availability of food reserves, which are determined by the methodology of the state order. The risks of sanctions actualized industrial safety. Its main content is the substitution of imported technologies and components by domestic developments. The energy complex is in a similar situation of risk minimization. Against the backdrop of uncertainty, nuclear power plays an important role in the international energy market. At the level of the nation-state, demographic security plays an important role. Its relevance is due to the decline in the birth rate, the aging of the population and disproportions between generations.

As a result, problems arise in the implementation of social programs, as the proportion of the working-age population is declining. States where population depopulation takes place raise the retirement age, attract people of working age through the mechanism of labor migration. Australia, Canada, New Zealand, the USA and Germany have experience in attracting the population. High demographic growth rates also pose risks to the internal stability of states, as an acute employment problem arises.

Threats reflect the presence of external and internal destructive factors that can destroy the social system. External threat factors include geopolitical ambitions, which are transformed into military conflicts. Because of this, states are forced to have a military-industrial complex and armed forces. If the state does not have its own military-industrial complex, then it spends huge financial resources on ensuring national security.

Internal threats are created by terrorism and the shadow economy, in the space of which there are criminal organizations and individuals who commit illegal acts. The sphere of their interests is drug trafficking, slave trade, sexual exploita-

tion, trade in donor organs and contract killings. All these actions fall under a legal assessment that allows the death penalty in a number of states.

A special direction of external and internal threats was created by social networking technologies. The external format uses information and hybrid warfare technologies. In the internal format, criminal elements use cybernetic bullying and phishing. The main goal of social engineers is the financial resources of citizens, as well as threats against people whose professional activities are related to state structures of law and order.

4.3.3. Philosophy of technology

Scientific and technological progress and scientific and technological revolutions have created the phenomenon of technological determinism and led to the formation of the philosophy of technology. The term "philosophy of technology" was introduced by E. Kapp. Until the twentieth century, philosophy was dominated by the thesis of the neutrality of technology in relation to social processes. This thesis was formulated by Aristotle. But already in the process of introducing the achievements of the first industrial revolution into production, workers began to consider machines as a direct competitor in the labor market. Workers began to break production equipment (Luddite movement).

The negative attitude to technology was formed by the First World War. It became obvious that technology not only deprives workers of employment, but is also created and used to kill each other. The duality of technology in the context of its benefits and the risks and threats it creates has created two directions in philosophy. One – technical optimists – is focused on substantiating the importance of scientific and technological progress and its objectivity in the form of technological determinism. This direction has become in demand in production management.

T. Veblen substantiated the thesis about the leading role of technical specialists in society. This is how the theory of technocracy appeared. Technocrats include managers with a higher technical education who, in the management system, ensure the functioning of the main vital systems for society, regardless of party and

ideological preferences. Positivism in the person of O. Comte substantiated the importance of science for the development of technology.

When the developers of engineering and technology reached the goal of creating artificial analogues of a person in their ambitions, they found themselves in demand in cognitive sciences, philosophy of information, neurophilosophy and philosophy of consciousness. They found themselves in a single interdisciplinary space with the theory of artificial intelligence.

There are philosophers who regard scientific and technological progress as an inevitability and see the main task to investigate how an individual feels in the social environment created by technology and technology and what are the features of this social environment.

With the emergence of the topic of artificial intelligence, philosophers have become interested in the concepts of digital anthropology, visual anthropology, digital socialization, and digital generations. The subject of study was virtual reality and augmented reality, immersive space. A wide range of social topics has emerged in the space of the Internet. It is associated with the use of information technologies by certain groups of people for geopolitical, terrorist and criminal purposes. Issues of cyber security have become topical.

They provide legal support. An important role is given to the ethics of software engineering. The topics of digital ecosystems and metauniverses are being actively discussed. The subject of discussion was the concept of technological singularity. It indicates a point of no return in the design activity. Artificial intelligence is out of control. Supporters of the theory of strong artificial intelligence have a strategy of coupled human evolution and neural networks. For this purpose, invasive and non-invasive interfaces are being developed.

As part of the Industry 4.0 strategy, the practice of interfacing industrial devices and technologies with numerical software is being implemented. As a result, the Internet of Things has become relevant. It integrates various technical physical devices into a single process coordination network to solve production problems. Pairing provides intelligent peripherals of sensors, sensors and cameras. Digital

twins of production are used. As a result, concepts such as a smart home, a drone, a taxi without a driver, a smart city, a virtual enterprise have become widespread.

4.3.4. Futurology and philosophy

Futures studies (philosophy of the future), or futures research, is the systematic study of possible, probable and preferable futures. The field has broadened into an exploration of alternative futures and deepened to investigate the worldviews and mythologies that underlie our collective prospects.

In 1943, a German social scientist named Ossip Flechteim coined the term ‘futurology.’ Flechteim proposed a new science of probability, drawing on scientific scholarship to make informed predictions of the future. Futurology was meant to be systematic and scientific in its workings, enabling educated forecasts in a range of possible directions. In his 1945 article ‘Teaching the Future,’ Flechteim recommended the study of the future as an academic discipline. This recommendation was not realised until 1966, when the first university course solely devoted to the future was founded by Alvin Toffler. ‘Futurologist’ was increasingly used with ‘futurist’ to mean any scientist, social scientist or technical expert qualified to predict aspects of the future.

A prominent theme in pronouncements on the future is technological progress, first in relation to industrial technology, later in the context of post-industrial or information technology. A turning-point in futurology discourse can be isolated around 1973, when ideas of technological progress begin to be challenged in the public sphere; from that date, environmental concern becomes increasingly significant in discussions of the future.

A new, discordant, voicing of the future appeared in 1970 with the publication of the book Future Shock by futurologist Alvin Toffler. This book documented the stress and disorientation occasioned by the ‘information overload’ of modern living (1970: 318). Technological innovation could provoke negative responses, according to Toffler, including fear of the future. Future shock arises from ‘too

much change in too short a period of time' (1970: 12), as citizens of a technologically advanced society struggle to deal with the heightened pace of life.

Toffler characterised contemporary Western societies as 'post-industrial,' drawing on the term coined in 1969 by sociologist Alan Touraine, and later popularised by Daniel Bell in his 1974 book The Coming of Post-Industrial Society. A post-industrial society has the majority of its urban workforce engaged in the service sector, dealing with information rather than industry or agriculture.

Toffler warned that future shock is the 'disease of change' in a post-industrial society, when individuals fail to adapt to the accelerating pace of this 'roaring current of change' (1970: 11). As a futurologist, Toffler wanted to increase the 'future-consciousness' of his readers and to 'humanise' the future (1970: 14) – but Future Shock highlighted the adverse social effects for those, especially the elderly, 'overwhelmed by change' (1970: 11). The environment became more prominent in public life in 1970. In the USA, the Environmental Protection Agency was founded, instituting new regulations on the chemical industry: DDT was banned in the USA two years later.

Popular culture was beginning to reflect concerns for the ecology as a result of pollution and industrial damage to the environment: 'Look at Mother Nature on the run in the 1970s,' Neil Young sang in 'After the Goldrush,' released in 1970. The following year, Marvin Gaye's 'Mercy Mercy Me (The Ecology)' documented a range of environmental blights caused by industrial contaminants: pollution, oil spills, radiation, mercury-poisoning of fish and – echoing Rachel Carson's Silent Spring – 'animals and birds who live nearby are dying …'

There is a substantial cross-disciplinary scholarship on future studies, drawing on sociology, anthropology, media and cultural studies, literary studies, studies of technology and society, and other disciplines. Futurologists have made predictions in recent years based on economics, demographics, political theory and developments in information technology. The future studies scholarship in general adopts a critical sociological perspective, describing the socioeconomic and cultural determinants that shape visions of the future.

As the anthropologist Marc Augé writes in his book The Future: ‘The future, even when it concerns the individual, always has a social dimension: it depends on others’ (Augé 2014: 2). The anthropologist Arjun Appadurai has considered the theoretical approach to ‘the future as cultural fact,’ taking into account the human preoccupations ‘imagination, anticipation, and aspiration’ (2013: 286).

Augé’s critical anthropology focuses on the political and economic forces shaping social development: ‘change is fundamentally economic and driven by technological development’ (2013: 47). Globalisation, growing social inequality and environmental damage resulting from ‘the imperatives of development and growth’ (2013: 51) are for Augé the factors determining the near future: ‘we can already see the outlines of a transnational planetary oligarchy and an unequal planetary society’ (2013: 52).

Other recent predictions of the future focus on the social impact of advanced information technology in the near future. In Homo Deus: A Brief History of Tomorrow (2017), Yuval Noah Harari concludes his history of Homo sapiens with a prediction of the species’ displacement by one of its own inventions: ‘dataism’ or the ‘data religion.’ Harari defines dataism as the view that ‘the universe consists of data flows,’ with the corollary that ‘the value of any phenomenon or entity is determined by its contribution to data processing’ (Harari 2017: 430). Harari projects a future of data controlled by algorithms and artificial intelligence, finding the possibility that ‘dataism threatens to do to Homo sapiens what Homo sapiens has done to all other animals’ (2017: 460).

If digital disruption continues the imperative of technological progress, displaced into a post-industrial context, it is not nevertheless the dominant factor in current imaginings of the future. The most significant ‘disruption’ in the future will not emanate from networked computers, unless the electricity needed to power the servers and computers is taken into account. Climate change is a projection into the future publicised widely on an international basis, through the agency of the Intergovernmental Panel on Climate Change and other outlets.

Climate change is now incorporated into many models; insurance and risk management, professions whose business is managing the future, install global warming as a central factor in modelling the future. Environmentalists demand of government and industry a future based on renewable energy sources rather than on fossil fuels, in a desperate bid to contain carbon emissions and climate change. Melting permafrost and rising sea levels threaten islands and sea-level cities, with potential displacement of millions due to global warming.

In April 2017, the New York Times asserted that ‘our climate future is actually our climate,’ observing that the future ‘we’ve been warned about is beginning to saturate the present’ (Mooallen 2017: MM36). Record high temperatures and extreme weather events around the world in 2017 and 2018 provoked the growing fear that we are already living in the future. Visions of the future now project anxiety for the state of the environment, and for all creatures – including humans – who depend on it.

Section 5. Theory of knowledge and philosophy of science

Topic 5.1. The variety of forms of knowledge and the problem of truth in philosophy

5.1.1. Theory of knowledge

Cognition refers to "the mental action or process of acquiring knowledge and understanding through thought, experience, and the senses"It encompasses many aspects of intellectual functions and processes such as: attention, the formation of knowledge, memory and working memory, judgment and evaluation, reasoning and "computation", problem solving and decision making, comprehension and production of anguage.

Cognitive processes use existing knowledge and generate new knowledge. Cognitive processes are analyzed from different perspectives within different contexts, notably in the fields of inguistics, nesthesia, euroscience, sychiatry, sychology, education, philosophy, anthropology, biology, systemics, logic, and computer science. These and other different approaches to the analysis of cognition are syn-

thesised in the developing field of cognitive science, a progressively autonomous academic discipline.

Basic forms of sensory and rational cognition. Sensation is the physical process during which sensory systems respond to stimuli and provide data for perception. A sense is any of the systems involved in sensation. During sensation, sense organs engage in stimulus collection and transduction. Sensation is often differentiated from the related and dependent concept of perception, which processes and integrates sensory information in order to give meaning to and understand detected stimuli, giving rise to subjective perceptual experience, or qualia.

Sensation and perception are central to and precede almost all aspects of cognition, behavior and thought. A mental representation (or cognitive representation), in philosophy of mind, cognitive psychology, neuroscience, and cognitive science, is a hypothetical internal cognitive symbol that represents external reality, or else a mental process that makes use of such a symbol: "a formal system for making explicit certain entities or types of information, together with a specification of how the system does this".

Mental representation is the mental imagery of things that are not actually present to the senses In contemporary philosophy, specifically in fields of metaphysics such as philosophy of mind and ontology, a mental representation is one of the prevailing ways of explaining and describing the nature of ideas and concepts.

Mental representations (or mental imagery) enable representing things that have never been experienced as well as things that do not exist. Think of yourself traveling to a place you have never visited before, or having a third arm. These things have either never happened or are impossible and do not exist, yet our brain and mental imagery allows us to imagine them.

Although visual imagery is more likely to be recalled, mental imagery may involve representations in any of the sensory modalities, such as hearing, smell, or taste. Mental representations also allow people to experience things right in front of them – though the process of how the brain interprets the representational content is debated.

5.1.2. Conception of the truth

Truth is the property of being in accord with fact or reality. In everyday language, truth is typically ascribed to things that aim to represent reality or otherwise correspond to it, such as beliefs, propositions, and declarative sentences. Truth is usually held to be the opposite of falsity. The concept of truth is discussed and debated in various contexts, including philosophy, art, theology, and science.

Most human activities depend upon the concept, where its nature as a concept is assumed rather than being a subject of discussion; these include most of the sciences, law, journalism, and everyday life. Some philosophers view the concept of truth as basic, and unable to be explained in any terms that are more easily understood than the concept of truth itself. Most commonly, truth is viewed as the correspondence of language or thought to a mind-independent world. This is called the correspondence theory of truth.

Various theories and views of truth continue to be debated among scholars, philosophers, and theologians. There are many different questions about the nature of truth which are still the subject of contemporary debates, such as: How do we define truth? Is it even possible to give an informative definition of truth? What things are truthbearers and are therefore capable of being true or false? Are truth and falsity bivalent, or are there other truth values? What are the criteria of truth that allow us to identify it and to distinguish it from falsity? What role does truth play in constituting knowledge? And is truth always absolute, or can it be relative to one's perspective?

Correspondence theories emphasize that true beliefs and true statements correspond to the actual state of affairs. This type of theory stresses a relationship between thoughts or statements on one hand, and things or objects on the other. It is a traditional model tracing its origins to ancient Greek philosophers such as Socrates, Plato, and Aristotle. This class of theories holds that the truth or the falsity of a representation is determined in principle entirely by how it relates to "things" by whether it accurately describes those "things".

A classic example of correspondence theory is the statement by the thirteenth century philosopher and theologian Thomas Aquinas: "Veritas est adaequatio rei et intellectus" ("Truth is the adequation of things and intellect"), which Aquinas attributed to the ninth century Neoplatonist Isaac Israeli. Aquinas also restated the theory as: "A judgment is said to be true when it conforms to the external reality".

For coherence theories in general, truth requires a proper fit of elements within a whole system. Very often, though, coherence is taken to imply something more than simple logical consistency; often there is a demand that the propositions in a coherent system lend mutual inferential support to each other. So, for example, the completeness and comprehensiveness of the underlying set of concepts is a critical factor in judging the validity and usefulness of a coherent system.

A pervasive tenet of coherence theories is the idea that truth is primarily a property of whole systems of propositions, and can be ascribed to individual propositions only according to their coherence with the whole. Among the assortment of perspectives commonly regarded as coherence theory, theorists differ on the question of whether coherence entails many possible true systems of thought or only a single absolute system.

The three most influential forms of the pragmatic theory of truth were introduced around the turn of the 20th century by Charles Sanders Peirce, William James, and John Dewey. Although there are wide differences in viewpoint among these and other proponents of pragmatic theory, they hold in common that truth is verified and confirmed by the results of putting one's concepts into practice.

Topic 5.2 Science and its sociocultural status

5.2.1. Philosophy of science

Philosophy of science is a branch of philosophy concerned with the foundations, methods, and implications of science. The central questions of this study concern what qualifies as science, the reliability of scientific theories, and the ulti-

mate purpose of science. This discipline overlaps with metaphysics, ontology, and epistemology, for example, when it explores the relationship between science and truth. Philosophy of science focuses on metaphysical, epistemic and semantic aspects of science. Ethical issues such as bioethics and scientific misconduct are often considered ethics or science studies rather than philosophy of science.

Empirical and theoretical levels of scientific knowledge. Methods of scientific research. Empirical levels of scientific knowledge. Experiment – is a procedure carried out to support, refute, or validate a hypothesis. Experiments provide insight into cause-and-effect by demonstrating what outcome occurs when a particular factor is manipulated. Experiments vary greatly in goal and scale, but always rely on repeatable procedure and logical analysis of the results. There also exists natural experimental studies.

Observation is the active acquisition of information from a primary source. In living beings, observation employs the senses. In science, observation can also involve the perception and recording of data via the use of scientific instruments. The term may also refer to any data collected during the scientific activity. Observations can be qualitative, that is, only the absence or presence of a property is noted, or quantitative if a numerical value is attached to the observed phenomenon by counting or measuring.

Measurement is the numerical quantitation of the attributes of an object or event, which can be used to compare with other objects or events. The scope and application of measurement are dependent on the context and discipline. In natural sciences and engineering, measurements do not apply to nominal properties of objects or events, which is consistent with the guidelines of the International vocabulary of metrology. However, in other fields such as statistics as well as the social and behavioural sciences, measurements can have multiple levels, which would include nominal, ordinal, interval and ratio scales.

5.2.2. Basic scientific research

In science, fundamental and applied research are traditionally distinguished. This division is enshrined in the law of the Republic of Belarus on science. Fundamental scientific research solves long-term strategic tasks related to the discovery of new directions and objects.

They are designed for the long term up to fifty years. Fundamental science is represented by laws and theory, as well as theoretical models. The fundamental theory is constructed as a hypothesis by means of the hypothetical-deductive method. Its mathematical interpretations are concretized by models. All these forms of fundamental science involve the implementation of procedures for experimental proof of their provisions. Features of the classical and non-classical methodology for constructing a theory in physics were studied by V. S. Stepin in the monograph "The Formation of Scientific Theory".

Fundamental science involves the construction of large research centers. These are astronomical observatories and particle accelerators. These are expensive projects. Among the well-known representatives of fundamental science is Zh.I. Alferov, who was a student of the Belarusian Polytechnic Institute (currently it is the Belarusian National Technical University).

A fundamental role in modern science is played by mathematics and physics, on the basis of which technical sciences are based. In physics, the studies of I. Newton (classical mechanics), A. Einstein (relativistic mechanics, general theory of relativity), M. Planck (quantum mechanics and optics) played an important role. In mathematics, a fundamental role was played by R. Descartes, B. Pascal, G. Leibniz, P.S. Laplace, I. Newton, J. Buhl.

D .I. played a fundamental role in chemistry. Mendeleev (theory of periodicity of chemical elements). In biology, the evolutionary theory developed by Charles Darwin plays a fundamental role. Cybernetics (N. Wiener) and the related feedback principle play a fundamental role in the development of information technologies. System research plays a fundamental role in economic sciences and

management theory A. Smith, K. Marx, A. Bogdanov, G. Kondratiev, J. Keynes, F. Hayek.

5.2.3. Applied scientific research

Applied scientific research is part of R&D. They adapt the results of fundamental research to solving practical problems of technical sciences and development activities. This activity is based on heuristics and TRIZ (the theory of inventive problem solving), as well as on mathematical logic and the theory of artificial intelligence. An important role in applied science is given to scientific ethics, copyright and intellectual property and the fight against plagiarism.

The priority is scientific etiquette and the moral responsibility of a scientist for ongoing scientific research. Based on the disciplinary structure, interdisciplinary projects are formed. One of them was NBICS – the concept. It involves the use of nano-, bio-, information, cognitive and social technologies in design solutions. This is a trend of scientific and technological progress, the basis of which is formed by scientific, technical and industrial revolutions with subsequent stages of modernization of industrial production. At the beginning of the 21st century, applied science is integrated with the tasks of the fourth industrial revolution.

The technologies of Big Data, the Internet of things, cyber-physical systems are used. Additive technologies have been used. A significant part of scientific research is automated. These are single complexes for collecting, storing and processing data. They are in demand in seismology, climatology, oceanology, construction, and energy. Search engines play an important role.

Applied science is actively represented in design bureaus, where developments are underway to expand and modernize the product line of industrial companies of the Republic of Belarus. In the structure of the National Academy of the Republic of Belarus there are scientific and technical centers in specific areas of engineering development for the agricultural complex and industry.

Applied research in the Republic of Belarus is financed by the State Committee for Science and Technology. Applied developments are integrated into the state program for the development of smart industry in the Republic of Belarus.

5.2.4. Methodology of scientific research

The methodology contains conceptual and normative parts in its structure. The conceptual part is represented by the theory of the method. According to this theory, the method contains a program of actions to solve a specific research problem. Since there are many action programs and methods, there is a variety of methods. Some of them are used at the stage of collecting data and information. These are methods of scientific observation, measurement (theory of metrology), experiment. Data collection is carried out using automated systems for collecting, processing and monitoring the environment. These are electronic telescopes, electron microscopes, digital measuring systems, automated experimental setups.

Methods play an important role in the theory building process. These are axiomatic and hypothetical-deductive methods, as well as methods of ascent from the concrete to the abstract, idealization, modeling, formalization. Mathematical methods play an important role in constructing a theory.

A separate group is formed by search methods and techniques. They contribute to generating ideas and solving problem situations. Brainstorming is one of these methods. There is a large group of special methods. They have a specification for solving specific problems and are used within strictly defined disciplinary boundaries. In addition to the theory of method, scientific methodology includes a description of the main components and stages of the research process.

According to this description, scientific research involves the selection and approval of a topic, the justification of its relevance, the formulation of goals and objectives, as well as hypotheses and methods for solving the tasks that correspond to specific stages of the study.

Scientific research through the abstract part is introduced into the context of evaluating the results obtained by other researchers and determining the novelty of the claimed author's research. When considering novelty, the results of scientific

research are tested using special anti-plagiarism computer programs in order to ensure the originality of the results obtained and the absence of copyright infringement. The results of scientific research are presented in the form of scientific articles, monographs, abstracts of reports at conferences on relevant topics. The applied part is presented at exhibitions of scientific and technological achievements.

5.2.5. Science and innovation activity

In order to rationalize scientific and technical research, to give it a target character, a system of innovation activities has been formed, including: strategic marketing; R&D; organizational and technological component (technoparks); innovative production, turning into a continuously modernizing infrastructure and communications. Strategic marketing is to study the dynamics of the market in the field of needs, rising prices, including energy, environmental requirements, safety requirements. The main tasks of R&D are: new knowledge and new areas of their application; theoretical and experimental verification of the possibility of materialization of knowledge in the sphere of production; practical implementation of innovations. R&D involves: fundamental research (theoretical and exploratory); applied research; development work; experimental and experimental work.

The task of exploratory research is to discover new principles for creating products and technologies; previously unknown properties of materials and compounds. R&D is the final stage of R&D, associated with the transition from laboratory conditions and experimental production to industrial production. Development refers to systematic work that is based on existing knowledge obtained as a result of R&D. Developments are translated into the form of innovative projects.

An innovative project is a set of technical, organizational, planning and settlement and financial documentation, which undergoes an appropriate examination.

Research parks are engaged in providing conditions for the effective conduct of scientific research. Technological parks contribute to the organization of small science-intensive industries focused on technology transfer, commercialization of the results of scientific and technical developments.

Industrial parks ensure the placement of small science-intensive industries in a certain closed area, the creation of industrial premises and jobs. Gründer parks, being a kind of industrial parks, support the creation of new small firms in the manufacturing industry. Incubators of small science-intensive firms, business incubators can be part of technology parks or be independent organizations.

The methodology of innovation activity solves the problem of reconstructing the mechanisms of development and functioning of the innovation economy, which is characterized, firstly, by high unit costs while reducing the time of the innovation cycle (intensive option); secondly, low unit cost of resources, provided access to high technologies mastered in certain cluster zones.

Topic 5.3. Philosophy in the professional activity of a specialist

5.3.1. Philosophy in the professional activity of a specialist

In the second half of the twentieth century, the attention of researchers focused on the phenomenon of the information society. This attention was determined in the market economy of interest in new sources of profit through the provision of information services and advertising.

The basic needs of the middle class in the Western world for food, drink, automobiles, household appliances, and tourism were satisfied. A new level of needs was discovered in communication, first of all, in communication. This transition was facilitated by the third industrial revolution, which gave impetus to the development of computer technology. Initially, these technologies were not integrated with each other in the network. They also were not integrated with other technical devices of information and telephone and written communication.

The situation began to change in the second half of the twentieth century, when the concept of "information society" began to be actively discussed (F. Castells, E. Masuda). It followed from it that in the space of society the share of industry and agriculture is declining, and the role of information and knowledge is growing (D. Bell). But these intellectual reflections had no effect on the dynamics of industrial society. The turning point occurred when large telecommunications

companies entered the information services market, as well as the transformation of telephone communication technologies.

It has become mobile (mobile phone devices). Another step was the formation by transnational corporations of the space of social digital networks. There was a demand for software and hardware. Companies are facing the problem of information impasse. They needed automated data processing and decision-making complexes. These tasks became the basis for the development of technical cybernetics. One of its most important principles, discovered by N. Wiener, was the principle of feedback.

As soon as there was a tendency to understand technology and technology as a natural extension of the functions of the human brain, philosophy, together with the cognitive sciences, focused on the study of consciousness and the development of the theory of artificial intelligence. Logic in its mathematical modification was taken as a basis. This topic has become the subject of study of representatives of analytical philosophy, who were influenced by the works of G. Frege, R. Carnap, O. Neurath, B. Russell, L. Wittgenstein.

Under the tasks of software methodology, a formal apparatus of mathematical logic was developed, which, in combination with the theory of communication developed by K. Shannon, formed the basis of informatics (information theory). A. Turing, in the form of a test, was one of the first to define a computer program with the functions of the human brain. The test says that if a computer program responds adequately to questions, then it is artificial intelligence. It was the feedback principle that became the main way to test computer programs for the ability to imitate the logical functions of human thinking. The concepts of weak and strong artificial intelligence were introduced into everyday life.

As long as simulation scientists have worked with the syntax of logical thinking, they have not encountered the problems they have encountered in the field of semantics of logical thinking. This problem came to be referred to as qualia or the hard problem of consciousness (Chalmers). However, from a pragmatic point of view, computer programs have reached a fairly high level of implementa-

tion of the feedback principle. This is demonstrated by neural and expert systems that are integrated with deep machine technologies.

As a result, a methodology for self-learning of computer programs was implemented. They began to play an important role in the dialogue with users of information services. Based on them, robotics was developed.

Another direction in the development of artificial intelligence has become the convergence of all technological processes and technical devices based on digital platforms. An era without a barrier digital environment has begun. Technical devices have become devices. These developments began to be formulated as the fourth industrial revolution. The main components of this transformation called "Industry 4.0" are Big Data, the Internet of Things, cyber-physical systems, and additive technologies. As a result of digital modernization, industry, energy, logistics, marketing, trade, and the financial sector have become part of national social ecosystems. Digital generations have formed, which, under the conditions of physical restrictions created by the pandemic, have changed the formats of professional activity. Designers and programmers switched to computer modeling techniques and remote forms of labor organization. In professional activities, the methodology of digital twins is used.

Another direction in the development of artificial intelligence technologies has become human-machine systems, in which interfaces play an important role. A trend in the development of neural interfaces has been formed. They are relevant for the restoration of coordination (medicine), for the interaction of the operator with the artificial neural periphery of sensors, sensors and cameras. This peripheral, around the clock, provides control of the state of technological processes, as well as the environment.

The game industry, with its concept of possible worlds, has actualized the active use of virtual and augmented reality technologies. For these technologies, the hardware has been developed in the form of a headset of special glasses, joysticks, trackers and exoskeletons. All these technological components are implemented on the platforms of the digital metaverses.

The barrier-free environment in the information space has created opportunities not only for legal, but also for illegal business. Cybercrime is growing rapidly. Social engineering specializes in this type of crime. She combines professional skills in hacking security systems with a good knowledge of the age and gender characteristics of people's psychology. Among the criminal technologies, phishing and vishing have become widespread. Manipulation of individual and public consciousness has become part of criminal schemes. As a result, the role of legal instruments for regulating the information space is growing, as well as the importance of specialists in the field of cyber security.

Virtual reality is constructed by visualization technologies. They involve the use of computers. The idea of visualization was formulated by Richard Hemming. Visualization has become the natural way of data. It has developed as a scientific discipline. With its development came the understanding that the more fully a person can immerse himself in the model of the phenomenon or process under study, the more natural apparatus he uses to manipulate the data of this model, the better he understands the essence of what is happening. As a result, the term virtual reality appeared, and an understanding of the virtual environment was formed.

The concept of artificial reality was introduced by Myron Kruger in the late 60s of the twentieth century. In 1989, J. Lanier coined the term "virtual reality". The virtual environment is based on the creation of computer images, sounds, as well as imitations of tactile, tactile, temperature, vibration sensations.

These are olfactory simulation devices. There are projects and test implementations with connection to the human nervous system. These are brain interfaces that affect not only the human senses, but also directly on the nerve endings. The virtual environment completely separates the user from real reality using a VR helmet, headphones, joysticks, controllers, gloves, and other devices and replaces it with a simulation.

Virtual reality is defined as an interactive 3D graphic scene using a specialized display technology that immerses the user in real time in the created world, with direct manipulation of objects in the model space. One of the applications of

virtual reality allows you to maintain interactive interaction with a high degree of immersion at the same time for a large audience. Developed distributed multi-user virtual reality systems used to organize international seminars and conferences.

A virtual reality application is a hardware and software complex that provides user immersion in a virtual environment. The first pre-computer simulations appeared in 1928. Edwin Link created a flight simulator. The technical implementation of virtual reality has changed following the development of computers and display means. Experimental applications have been replaced by complex software and hardware systems for military, industrial and research tasks.

At first it was an expensive stereoscopic setup for highly specialized applications. The growth of GPU performance has ensured the transition of virtual reality technology into a mass niche.

VR technologies are at the stage of attracting investors. This is the phase of overcoming deficiencies that may alienate potential investors. Each technological innovation goes through several stages in the process of reaching maturity. This is the technological trigger stage. It is updated with the first publications about the new technology. It becomes the subject of wide discussion in the community.

In the disillusioning phase, the shortcomings of the technology are identified and the community is frustrated with the new technology. At the stage of overcoming the shortcomings, the main shortcomings are eliminated, interest slowly returns, and use in commercial projects begins.

A productivity plateau marks the onset of technology maturity. The community takes the technology for granted, recognizing its advantages and limitations. Although the shortcomings of VR technology have not yet been fully overcome, there are many examples of the use of virtual reality. These are a variety of training systems designed to teach driving skills and aircraft control. This is the management and study of both civil and military equipment, including remote control of technical means. This is the conduct of surgical operations, the development of practical skills with medical instruments at dentists.

These are car simulators; systems for creating virtual simulators; management of various technological processes, including joint work in a team: training of crews of fishing vessels, maintenance of railway stations, nuclear power plants. The virtual environment is the ideal learning environment. The layout of virtual environment systems together with various elements of simulators (hydraulic seats, dynamic platforms, feedback control systems) allows you to build simulators and attractions with a high immersion coefficient (immersive).

A special role is assigned to such a class of training systems as virtual laboratories. A virtual laboratory is a software package in which experiments can be reproduced that in real life are possible only in laboratory conditions. The use of such virtual laboratories allows users (students) to study remotely and at any time. This software allows you to reduce the cost of real laboratory resources, as well as reduce the risk of negative consequences as a result of an unsuccessful experiment or improper use of equipment, reagents, materials in the learning process.

A virtual lab can also be defined as an artificial environment created on a computer that allows users to experience a real experiment. The most effective approach in the educational process of teaching a laboratory workshop can be attributed to a combination of classes or independent work that alternates theoretical skills, the use of virtual technologies with the subsequent consolidation of the acquired skills and abilities in real laboratories. This combined approach allows students to familiarize themselves with the theoretical material, the procedure and the specifics of performing experiments on complex equipment in advance.

The problems of maintaining the material and technical base and the implementation of experiments, lack of equipment, the danger of experiments can be solved with the active introduction of virtual technologies into the educational process. Students and teachers find virtual simulations attractive because they are portable, easy to use, and highly efficient. Users also note the disadvantages of such solutions, which are limited freedom of action, poor manual response, and the lack of the possibility of practicing on real equipment in the process.

The virtual laboratory makes it easy to include game elements in the learning process, as a way to maintain attention and make the process of studying the material not only informative, but also exciting, eliminating routine memorization. Simulations can be either a desktop or web server solution – desktop applications can host more content, provide improved realism and use all the latest technologies. But virtual laboratories located on the network, due to technological features, have a less realistic visual component.

At the same time, they have the advantage of constant updates and additions, ease of installation, cross-platform, and the ability to access from anywhere and anytime. Virtual simulators allow you to increase involvement in training and preparedness of specialists, improve the visual perception of the technical process, reduce organization costs; scalability of the learning process, impartial assessment of activities, ensuring collective educational and methodological work. The largest amount of research is related to the simulation of engineering experiments and experiments.

Virtually nowhere is new powerful cross-platform game engines used to achieve realism, as well as more accurately reproduce experiences. The game engine is the central software component of computer and video games and other interactive applications with real-time graphics processing. It provides core technology, simplifies development, and often allows the game to run on multiple platforms. It is not suggested to use additional equipment (for example, virtual reality helmets and non-contact manipulation devices) that allow you to get a more complete immersive effect.

Each laboratory is made for a specific experiment there is no possibility of moving around the virtual laboratory. In each specific screen, there are only those objects with which there is an interaction, which in some way worsens the perception of a holistic picture of the functioning of the entire laboratory. The product has the ability to make a bad experience, but it will be possible to do this only with the help of pointless clicking on touch points. Of the advantages of the laboratory, one can name a huge amount of methodological material. Each experience or action is

described fairly accurately, with a glossary and a general description. It is implemented in 3D and uses low-poly graphics.

Virtual reality (hereinafter referred to as VR) is interpreted in many different ways. The number of interpretations is explained directly by the context of the use of this term, as well as by the fact that these technologies are constantly evolving and undergoing changes. VR has specific properties. Generative suggests that subjective reality is generated by psychic reality, and therefore is virtual reality.

Autonomy means that virtual reality exists outside of time and space and therefore has its own time and space. Interactivity makes virtual reality in demand. It always remains independent, even when interacting with other realities and the user is a full-fledged participant in the events, completely immersed in the process. All VR events take place at a given moment in time.

Known for VR without immersion; VR with collaborative infrastructure; VR with the effect of total immersion. Immersive virtual reality requires a sufficiently productive technology that can quickly recognize the actions of the subject and respond to them in real time. This is a realistic, detailed simulation of the world with an efficient representation of objects in a virtual environment. This is special equipment, including the latest immersive devices. One of the most important properties of virtual reality is the degree of immersion of the subject in the virtual world, which is achieved by generating the maximum similarity of the latter with the real world using simulation.

The advantage of simulation over simulation is the copying of objects and events at the model level. Virtual reality simulates something that does not exist in reality. Immersion in certain artificially synthesized conditions of virtual reality is called an immersive environment. Immersive environments have properties. Redundancy allows for multiple relationships with the environment.

Observation manifests itself in the process of constructing reality. The environment can only be that which is observable, even if it is present in physical reality. Construction reflects accessibility to cognitive experience. It characterizes a certain degree of readiness of the subject to be included in the environment. A rich

environment provides a wide range of influences on the user through the multi variance of relationships.

The immersive environment has its own independent history, independent of the external environment. It can easily take and maintain the stability of forms due to the diversity of content. It has local self-organization and temporal qualities of all elements of the environment. Extra subjective spatial localization involves placement independently of the subject.

Vector reflects the directional learning effect in a certain range of tasks. Integrity means the unity of the environment with the properties of the subject, in which the subject perceives the environment as a world of activity. Motive reflects the possibilities of the environment to influence the user's motivation. Interactivity captures the extent to which the user is able to participate in changing and shaping the established environment in real time.

Immersive reflects the ability of the environment to involve the user and orient him in the system of relations determined by the content of the environment. Presence expresses the feeling of being in a certain environment. It defines internal, subjective components. The components of the phenomenon of presence are considered to be involvement and immersion. Immersion represents the feeling of being in a computer-generated world. It is determined by the level of reaction of the senses to the conditions created by technology. An environment that shows high levels of immersion also creates a high sense of presence phenomenon.

An important component of the phenomenon of presence is involvement. This is a psychological state that manifests itself when focusing attention on a sequential set of related events or actions. Another factor is cognitive control. This is a system of metacognitive functions that tune specialized cognitive processes to solve certain problems under certain conditions. The processes of cognitive control are the processes of regulation of cognitive activity. It is Allocates three basic functions of cognitive control. These are switching between tasks, interference control and updating the contents of working memory.

The definition of cognitive control involves the adjustment of the human cognitive system to perform certain tasks in specific conditions, for example, in a virtual environment. A person uses the capabilities of his cognitive system to effectively solve problems in any conditions. Features of cognitive control can bring naturalness to the interaction of the subject with the virtual environment and, therefore, determine the appearance of a sense of presence and its degree. This is attention management. The user can arbitrarily focus on any objects in the environment, which increases the likelihood of a presence effect. Arbitrary suppression allows you to ignore external and internal distractors of the environment that are not related to interaction with it.

Switch allows you to switch between tasks. As a result, the occurrence of the phenomenon of presence depends on the effective change of attitudes. Achieving the effect of presence would not be effective without a special space in which the user would store data about the environment and the tasks performed within it. By storing all this data, working memory allows the user to build a complete model of the virtual environment. Monitoring and error correction help the user to detect discrepancies between the expected and actual values of cognitive parameters.

Therefore, the more developed the monitoring function, the more discrepancies can be identified, which means that the probability of a presence effect will be lower. The effect of presence would be unattainable without special technological means that affect the human senses, and involvement, which depends on the content of the environment.

It is impossible to say exactly what exactly causes the phenomenon of presence in a person in each specific virtual environment. An analysis of the nature of the phenomenon of presence shows the value of complex neuropsychological studies that confirm the specificity of human experiences in the state of presence in an immersive virtual environment. Presence has modifications.

In the context of environmental presence, a person experiences the possibility of interaction with the environment. In the context of social presence, a person assumes the presence of other persons in the same virtual environment with him. In

the context of personal presence, a person embeds himself in a virtual environment at the level of memories, imagining the prehistory of his appearance in the virtual world, accepting the experience of his behavior in it.

With a sufficient sense of immersion by the user, the body's natural responses should occur, just as it would in the real world. If the parameters are unchanged, then the environment does not have the necessary effect. Various equipment, output and feedback means are used to increase immersive and overcome cybernetic disease as much as possible. These are helmets and goggles; rooms; informational gloves; gamepads, joysticks and keyboards; Force feedback devices – digital gloves that give feedback (force feedback). Most human skills are directly related to fine motor skills of the hands (or motor fine skills).

We can also highlight omnidirectional treadmills; suspension systems, cabins and chairs; smell simulators; taste simulators; a full immersion suit that contains several systems. We can also single out a tactile feedback system for transmitting sensations; a motion capture system to track the user's position in space and move around it. Climate control allows you to feel cold, warm, decrease or increase in temperature.

Existing equipment for virtual environments increases immersive, but is not perfect due to errors in technical means, its own weight. It is often not comfortable enough for maximum immersion. Cybernetic disease is a serious factor that reduces the immersive of the environment it is difficult to fully suppress it due to the imperfection of existing technologies and the individual user's reaction to virtual environments. The challenge is to isolate the virtual environment from the physical environment and simulate your own movement, as the most immersive movement requires large free spaces.

Achieving the maximum effect of presence is not yet possible for average users due to too high prices for a complete set of equipment. The maximum effect of presence is also currently not achievable due to the fact that modern technologies weakly affect the human senses (such as taste and smell), do not ideally simulate some other sensations (in particular, tactile ones, for example, temperature,

weight or texture) objects of the environment). Subjective methods for assessing immersive do not allow one to accurately assess what level of presence the subject of the virtual environment feels.

Methods for assessing the immersive of a particular individual in a particular virtual environment have not been developed. For each individual subject of an immersive environment, unique conditions must be maintained and certain factors identified by specialists by examining the subject for its specific features of the body, analyzing cognitive functions, in which the level of immersiveness, measured using existing methods for assessing the effect of presence, will have the maximum value.

II. PRACTICAL SECTION

Seminar plan

Seminar lesson 1. Philosophy and worldview.

1. The subject of philosophy
2. Philosophy as a worldview and methodology
3. Historical types of philosophical outlook

Seminar lesson 2. Genesis of philosophical knowledge

1. Philosophy of the Ancient East.
2. Philosophical traditions of India
3. Philosophical traditions of China
4. Ancient philosophy

Seminar lesson 3. Philosophical thought of Belarus

1. Philosophy of the Middle Ages
2. Philosophy of the Renaissance
3. Philosophy of the New Age
4. Philosophy of Marxism

Seminar lesson 4. Ontology and philosophy of nature

1. Ontology: matter and motion
2. Philosophy of space and time

5. Philosophy of nature
6. Philosophical concepts of natural science
7. Biosphere and noosphere

Seminar lesson 5. Philosophical understanding of the problem of development. Dialectics and Synergetics

1. Philosophical theory of dialectics
2. Principles and laws of dialectics
3. Synergetics

Seminar lesson 6. The problem of man in philosophy and science

1. Philosophy of man
2. The nature and essence of man
3. Individual and society

Seminar lesson 7. Human consciousness as a subject of philosophical analysis

1. Philosophy of consciousness
2. Consciousness and artificial intelligence
3. Virtual reality and artificial intelligence
4. Public and individual consciousness

Seminar lesson 8. Society as an evolving system

1. Philosophy of society
2. Economic philosophy
3. Philosophy of technology

Seminar lesson 9. Prospects and risks of modern civilization

1. Globalization
2. Philosophy of history
3. Philosophy and futurology
4. Belarus in the modern civilizational process

Seminar lesson 10. Theory of knowledge and philosophy of science

1. Theory of knowledge
2. Theory of truth
3. Philosophy of science

4. Methodology of science

5. Philosophy in the professional activity of a specialist

Guidelines for Managedindependent work of students

Independent work of a student is a type of educational and cognitive activity, consisting in the individual, time-distributed performance of a set of tasks with the consulting and coordinating assistance of a teacher, focused on the self-organization of students. Independent work of students is planned in accordance with the Guidelines for the organization of independent work of students (cadets, listeners), approved by the Minister of Education of the Republic of Belarus on November 18, 2019.

Managed independent work of students is organized on the basis of an electronic educational and methodological complex. Lectures and seminars are a practical time for the activation of creative thinking among students, the formation of their skills of independent work. The most effective forms and methods of organizing students' independent work are:

- performance of test tasks;
- solution of problem situations and tasks;
- performance of creative tasks;
- analysis of scientific articles;
- preparation of annotations, reviews, abstracts;
- writing an essay;
- development of projects.

III. SECTION CONTROL OF KNOWLEDGE

3.1. Questions forthe exam

1. The subject of philosophy.
2. Philosophy and worldview.
3. Philosophy of the Ancient East.

4. Philosophical traditions of India.

5. Philosophical traditions of China.

6. Ancient philosophy.

7. Philosophy of the Middle Ages.

8. Philosophy of the Renaissance.

9. Philosophy of modern times: empiricism, rationalism, sensationalism.

10. German classical philosophy: Kant, Hegel, Feuerbach.

11. Philosophy of Marxism: dialectical materialistic understanding of nature and history.

12. Non-classical philosophy and its main directions.

13. Analytical philosophy.

14. Philosophical thought of Belarus.

15. Ontology and philosophy of nature.

16. Philosophy of space and time.

17. Dialectics and synergetics

18. Biosphere and noosphere.

19. Philosophy of man.

20. Philosophy of consciousness.

21. Consciousness and artificial intelligence.

22. Public and individual consciousness.

23. Theory of knowledge.

24. Theory of truth.

25. Philosophy of science.

26. The structure of science.

27. Applied scientific research.

28. Basic scientific research.

29. Research methodology.

30. Science and innovation.

31. Philosophy of society.

32. Economic philosophy.

33. Culture and civilization.

34. Ethics, aesthetics, philosophy of law.

35. Philosophy of history.

36. Safety philosophy

37. Prospects and risks of modern civilization.

38. Belarus in the modern civilizational process

39. Futurology and philosophy.

40. Philosophy in the professional activity of a specialist.

3.2. Test tasks

1. Define the main goal of philosophy:

a) study of the atomic and molecular structure of the material world;

b) experimental proof of a particular theory;

c) scientific picture of the Universe.

2. Choose the correct definition of materialism:

a) a direction in philosophy, whose representatives believe that the basis of the unity of the world is a material principle;

b) the doctrine of the emergence of matter from nothing;

c) theory of knowledge;

d) a direction in philosophy, whose representatives believe that the basis of the unity of the world is a spiritual principle.

3. Choose the correct definition of idealism:

a) the doctrine of the highest ideals of mankind;

b) a direction in philosophy, whose representatives believe that the basis of the unity of the world is a spiritual principle;

c) a person's idea of the perfection of something;

d) a direction in philosophy, whose representatives believe that the basis of the unity of the world is a material principle.

4. Indicate the area of philosophical knowledge aimed at comprehending the attributes of being:

a) epistemology;

b) axiology;

c) ontology;

d) anthropology.

5. Name the section of philosophy that studies cognitive activity:

a) ontology;

b) epistemology;

c) logic;

d) heuristics.

6. Determine the period of the emergence of philosophy:

a) the middle of the 1st century;

b) II-V centuries;

c) 6thcentury BC.;

d) X-VIII centuries. BC.

7. Worldview is ...:

a) the totality of objective knowledge about reality;

b) a set of value orientations of the individual;

c) the system of moral ideals and legal norms of human activity;

d) a system of human ideas about the world and their place in it.

8. Value is..:

a) the result of cognitive activity tested by practice and certified by logic;

b) reflection in the human mind of the social and cultural significance of certain phenomena of reality;

c) a range of items reflecting the high material standard of human life;

d) various phenomena and conditions that induce a person to activity.

9. Define the concept of scientific knowledge through its essential sign:

a) the result of cognitive activity, verified by socio-historical practice, expressing in sign form the objective properties of reality;

b) authoritative opinions of experts;

c) traditional ideas of people that are passed down from one generation to another;

d) information broadcast by the media.

10. Specify the signs of social philosophy:

a) consistency;

b) development;

c) civil society;

d) nature.

11. Choose the most accurate definition of thinking:

a) a form of logical thinking to reflect the subject in its essential features;

b) an extremely general concept to reflect the universal characteristics of reality;

c) a statement expressing a person's attitude to the content of the expressed thought.

12. Indicate the fundamental section of philosophy within which values are studied:

a) epistemology;

b) axiology;

c) metaphysics;

d) anthropology.

13. Indicate the philosopher who owns the idea that philosophy studies the world as being:

a) I. Kant;

b) Hegel;

c) R. Descartes;

d) K. Marx.

14. Corruption condemned:

a) T. Hobbes;

b) J. Vico;

c) B. Spinoza;

d) F. Engels.

15. Specify the definition of philosophy:

a) the theoretical core of the worldview;

b) the science of the most general patterns of functioning and development of nature, society and spiritual and cognitive activity of man;

c) love of wisdom;

d) an epoch expressed in thought.

16. Indicate the parameter of the philosophy of Ancient India:

a) life-practical;

b) logical-rational;

c) religious and mythological;

d) methodological and epistemological.

17. Artificial intelligence is:

a) electronic computer;

b) set of gaming machines

a) a technical system that solves problems and is capable of self-learning based on the transformation of mathematical models that imitate reality;

b) a set of problem solving algorithms.

18. Who is considered the first ancient philosopher:

a) Plato;

b) Thales;

c) Anaxagoras;

d) Abbreviated.

19. Who is considered the author of the concept of "philosophy":

a) Aristotle;

b) Hegel;

c) Pythagoras;

d) Seneca.

20. Which of the philosophers considered fire to be the basis of the world:

a) Anaximander;

b) Heraclitus;

c) Pythagoras;

d) Zeno of Elea.

21. Which of the ancient thinkers introduced the concept of "atom" into philosophy:

a) Gorgias;

b) Anaximander;

c) Democritus;

d) Aristotle.

22. Which school of ancient philosophy made language and speech a subject of study:

a) school of atomism;

b) school of sophists;

c) Milesian school;

d) the Eleatic school.

23. Name the founder of Taoism:

a) Mo Tzu;

b) Confucius;

c) Laozi;

d) Shang Yang.

24. Which of the ancient thinkers owns the statement: "Plato is my friend, but the truth is dearer":

a) Xenocrates;

b) Socrates;

c) Aristotle;

d) Pythagoras.

25. Globalization is:

a) the Internet;

b) social networks;

c) migration;

d) protectionism.

26. Which of the ancient Greek thinkers is credited with the development of formal logic:

a) Plato;

b) Pythagoras;

c) Aristotle;

d) Zeno.

27. Innovative activity is:

a) R&D;

b) NBICS;

c) TRIZ;

d) Brainstorming.

28. Theology is:

a) the principle of understanding reality, according to which man is the center and goal of the universe;

b) philosophical doctrine about God;

c) one of the Christian denominations;

d) a trend in Christianity based on the denial of the dogma of the Trinity.

29. Anthropology is...:

a) a belief system that recognizes the human right to freedom, happiness and the development of their abilities;

b) an ideology professing the principles of equality, justice and humanity;

c) the principle of understanding and explaining the world, according to which man is the center and goal of the universe;

d) the cult of human creative abilities.

30. Indicate the form of human activity, which is aimed at obtaining new knowledge and creating previously non-existent objects:

a) freedom;

b) creativity;

c) communication.

IV. AUXILIARY SECTION

4.1. Curriculum for the discipline "Philosophy" and a list of recommended literature

Belarusian National Technical University

APPROVED BY
Vice-Rector for Academic Affairs of the Belarusian National technical university
_____________ Yu. A. Nikolaychik
30. 06. 2023
Registration №. UD-РТИГ02-01/account.

PHILOSOPHY/ФИЛОСОФИЯ

Academic programme of higher educational establishment in academic discipline for speciality

6-05-0311-02 Economy and management/Экономика и управление
6-05-0412-01 Management/Менеджмент
6-05-0412-02 Business-administration/Бизнес-администрирование
6-05-0412-04 Marketing/Маркетинг
6-05-0611-01 Informational systems and technologies/Информационные системы и технологии
6-05-0612-01 Software engineering/Программная инженерия
6-05-0711-04 Engineering ecology/Инженерная экология
6-05-0713-04 Automation of technological processes and industries/Автоматизация технологических процессов и производств
6-05-0713-05 Robotics systems/Робототехнические системы
6-05-0714-01 High-temperature metal working technology/Технология высокотемпературной обработки металлов
6-05-0714-02 Engineering technology, cutting machines and tools/Технология машиностроения, металлорежущие станки и инструменты
6-05-0714-03 Engineering design and manufacture of materials and products/Инженерно-техническое проектирование и производство материалов и изделий из них
6-05-0714-05 Equipment and technologies of pack manufacture, trade and exposition-advertisement objects/Оборудование и технологии упаковочного производства, торговли и экспозиционно-рекламных объектов
6-05-0714-06 Vacuum, compressor and low-temperature equipment and technologies/Оборудование и технологии вакуумной, компрессорной и низкотемпературной техники
6-05-0714-08 Industrial design/Промышленный дизайн
6-05-0715-03 Vehicles, tractors, mobile and technological complexes/Автомобили, тракторы, мобильные и технологические комплексы
6-05-0715-04 Hydropneumatic systems of mobile and technological machinery and equipment/Гидропневмосистемы мобильных и технологических машин и оборудования
6-05-0715-05 Power plants/Силовые установки
6-05-0715-06 Water vehicles/Водные транспортные средства
6-05-0715-07 Operation of land transport and technological machinery and systems/Эксплуатация наземных транспортных и технологических машин и комплексов
6-05-0715-10Technologies of transport processes/Технологии транспортных процессов
6-05-0715-12 Road and transport infrastructure operation/Эксплуатация дорожно-транспортной инфраструктуры
6-05-0716-01 Metrology, standartisation and quality assurance/Метрология, стандартизация и контроль качества
6-05-0716-02 Sports engineering/Спортивная инженерия
6-05-0716-03 Information and measurement devices and systems/Информационно-измерительные приборы и системы
6-05-0716-04 Optoelectronic and laser technology/Оптико-электронная и лазерная техника
6-05-0716-05 Technical security systems /Технические системы обеспечения безопасности
6-05-0716-06 Biomedical engineering/Биомедицинская инженерия
6-05-0716-08 Micro systems and Nano systems engineering/Микро- и наносистемная техника
6-05-0718-01 Engineering Economy/Инженерная экономика
6-05-0719-01 Engineering and pedagogical activity/Инженерно-педагогическая деятельность
6-05-0731-01 Geodesy/Геодезия
6-05-0732-01 Technical maintenance of buildings and facilities/Техническая эксплуатация зданий и сооружений
6-05-0732-02 Expertise and real estate management/Экспертиза и управление недвижимостью
6-05-1036-01 Customs/Таможенное дело
6-05-1041-01 Traffic management and transport planning/Организация дорожного движения и транспортное планирование
6-05-1042-01 Transport logistics/Транспортная логистика
7-07-0712-01 Electricity and electrical engineering/Электроэнергетика и электротехника
7-07-0712-02 Heat and Power Engineering/Теплоэнергетика и теплотехника
7-07-0712-03 Design and operation of nuclear power plants/Проектирование и эксплуатация атомных электрических станций
7-07-0714-01 Machinery and equipment for mining productions/Машины и оборудование для горнодобывающих производств
7-07-0724-01 Development of mineral deposits/Разработка месторождений полезных ископаемых
7-07-0731-01 Architecture/Архитектура
7-07-0731-02 Architectural design/Архитектурный дизайн
7-07-0732-01 Construction of buildings and facilities/Строительство зданий и сооружений
7-07-0732-02 Engineering networks, equipment of buildings and facilities/Инженерные сети, оборудование зданий и сооружений
7-07-0732-03 Transport communications construction/Строительство транспортных коммуникаций

Minsk 2023

Academic programme is made up on the basis of educational standard: OCBO 6-05-0311-02-2023; OCBO 6-05-0412-01-2023; OCBO 6-05-0412-02-2023; OCBO 6-05-0412-04-2023; OCBO 6-05-0611-01-2023; OCBO 6-05-0612-01-2023; OCBO 6-05-0713-04-2023; OCBO 6-05-0713-05-2023; OCBO 6-05-0714-01-2023; OCBO 6-05-0714-02-2023; OCBO 6-05-0714-03-2023; OCBO 6-05-0714-05-2023; OCBO 6-05-0714-08-2023; OCBO 6-05-0715-03-2023; OCBO 6-05-0715-04-2023; OCBO 6-05-0715-06-2023; OCBO 6-05-0715-07-2023; OCBO 6-05-0715-10 2023; OCBO 6-05-0715-12-2023; OCBO 6-05-0716-01-2023; OCBO 6-05-0716-02-2023; OCBO 6-05-0716-03-2023; OCBO 6-05-0716-04-2023; OCBO 6-05-0716-05-2023; OCBO 6-05-0716-06-2023; OCBO 6-05-0716-08-2023; OCBO 6-05-0718-01-2023; OCBO 6-05-0719-01-2023; OCBO 6-05-0731-01-2023; OCBO 6-05-0732-01-2023; OCBO 6-05-0732-02-2023; OCBO 6-05-1036-01-2023; OCBO 6-05-1041-01-2023; OCBO 6-05-1042-01-2023; OCBO 7-07-0712-01-2023; OCBO 7-07-0712-02-2023; OCBO 7-07-0712-03-2023; OCBO 7-07-0714-01-2023; OCBO 7-07-0724-01-2023; OCBO 7-07-0731-01-2023; OCBO 7-07-0731-02-2023; OCBO 7-07-0732-01-2023; OCBO 7-07-0732-02-2023; OCBO 7-07-0732-03-2023 and syllabus specialty 6-05-0311-02 «Economy and management»; 6-05-0412-01 «Management»; 6-05-0412-02 «Business-administration»; 6-05-0412-04 «Marketing»; 6-05-0611-01 «Informational systems and technologies»; 6-05-0612-01 «Software engineering»; 6-05-0711-04 «Engineering ecology»; 6-05-0713-04 «Automation of technological processes and industries»; 6-05-0713-05 «Robotics systems»; 6-05-0714-01 «High-temperature metal working technology»; 6-05-0714-02 «Engineering technology, cutting machines and tools»; 6-05-0714-03 «Engineering design and manufacture of materials and products»; 6-05-0714-05 «Equipment and technologies of pack manufacture, trade and exposition-advertisement objects»; 6-05-0714-06 «Vacuum, compressor and low-temperature equipment and technologies»; 6-05-0714-08 «Industrial design»; 6-05-0715-03 «Vehicles, tractors, mobile and technological complexes»; 6-05-0715-04 «Hydropneumatic systems of mobile and technological machinery and equipment»; 6-05-0715-05 «Power plants»; 6-05-0715-06 «Water vehicles»; 6-05-0715-07 «Operation of land transport and technological machinery and systems»; 6-05-0715-10 «Technologies of transport processes»; 6-05-0715-12 «Road and transport infrastructure operation»; 6-05-0716-01 «Metrology, standartisation and quality control»; 6-05-0716-02 «Sports engineering»; 6-05-0716-03 «Information and measurement devices and systems»; 6-05-0716-04 «Optics and electronics and laser technique»; 6-05-0716-05 «Technical systems of safety provision»; 6-05-0716-06 «Biomedical engineering»; 6-05-0716-08 «Micro systems and Nano systems engineering»; 6-05-0718-01 «Engineering Economy»; 6-05-0719-01 «Engineering and pedagogical activity»; 6-05-0731-01 «Geodesy»; 6-05-0732-01 «Technical maintenance of buildings and facilities»; 6-05-0732-02 «Expertise and real estate management»; 6-05-1036-01 «Customs»; 6-05-1041-01 «Traffic management and transport planning»; 6-05-1042-01 «Transport logistics»; 7-07-0712-01 «Electricity and electrical engineering»; 7-07-0712-02 «Heat and Power Engineering»; 7-07-0712-03 «Design and operation of nuclear power plants»; 7-07-0714-01 «Machinery and equipment for mining productions»; 7-07-0724-01 «Development of mineral deposits»; 7-07-0731-01 «Architecture»; 7-07-0731-02 «Architecture design»; 7-07-0732-01 «Construction of buildings and facilities»;

7-07-0732-02 «Engineering networks, equipment of buildings and facilities»; 7-07-0732-03 «Transport communications building»

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Department of «Philosophical Teachings; of the Belarusian National Technical University
(minutes № 9 dated 18.05. 2023.)

the Head of a department _____ A.I. Loiko

Methodical commission of the Faculty of Management Technologies and Humanitarianization of the Belarusian National Technical University
(minutes № 6 dated 20.06 2023.)

Chairman of the methodical commissions _____ I.N.Kandrichina

Scientific Library
Belarusian National Technical University _____ T.I. Biryukova

Scientific and methodical council of Belarusian National Technical University
(Minutes № 5 dated 30.06. 2023)

EXPLANATORY NOTE

Academic programme of higher educational establishment in academic discipline «Philosophy» for speciality: 6-05-0311-02 «Economy and management»; 6-05-0412-01 «Management»; 6-05-0412-02 «Business-administration»; 6-05-0412-04 «Marketing»; 6-05-0611-01 «Informational systems and technologies»; 6-05-0612-01 «Software engineering»; 6-05-0711-04 «Engineering ecology»; 6-05-0713-04 «Automation of technological processes and industries»; 6-05-0713-05 «Robotics systems»; 6-05-0714-01 «High-temperature metal working technology»; 6-05-0714-02 «Engineering technology, cutting machines and tools»; 6-05-0714-03 «Engineering design and manufacture of materials and products»; 6-05-0714-05 «Equipment and technologies of pack manufacture, trade and exposition-advertisement objects»; 6-05-0714-06 «Vacuum, compressor and low-temperature equipment and technologies»; 6-05-0714-08 «Industrial design»; 6-05-0715-03 «Vehicles, tractors, mobile and technological complexes»; 6-05-0715-04 «Hydropneumatic systems of mobile and technological machinery and equipment»; 6-05-0715-05 «Power plants»; 6-05-0715-06 «Water vehicles»; 6-05-0715-07 «Operation of land transport and technological machinery and systems»; 6-05-0715-10 «Technologies of transport processes»; 6-05-0715-12 «Road and transport infrastructure operation»; 6-05-0716-01 «Metrology, standartisation and quality control»; 6-05-0716-02 «Sports engineering»; 6-05-0716-03 «Information and measurement devices and systems»; 6-05-0716-04 «Optics and electronics and laser technique»; 6-05-0716-05 «Technical systems of safety provision»; 6-05-0716-06 «Biomedical engineering»; 6-05-0716-08 «Micro systems and Nano systems engineering»; 6-05-0718-01 «Engineering Economy»; 6-05-0719-01 «Engineering and pedagogical activity»; 6-05-0731-01 «Geodesy»; 6-05-0732-01 «Technical maintenance of buildings and facilities»; 6-05-0732-02 «Expertise and real estate management»; 6-05-1036-01 «Customs»; 6-05-1041-01 «Traffic management and transport planning»; 6-05-1042-01 «Transport logistics»; 7-07-0712-01 «Electricity and electrical engineering»; 7-07-0712-02 «Heat and Power Engineering»; 7-07-0712-03 «Design and operation of nuclear power plants»; 7-07-0714-01 «Machinery and equipment for mining productions»; 7-07-0724-01 «Development of mineral deposits»; 7-07-0731-01 «Architecture»; 7-07-0731-02 «Architecture design»; 7-07-0732-01 «Construction of buildings and facilities»; 7-07-0732-02 «Engineering networks, equipment of buildings and facilities»; 7-07-0732-03 «Transport communications building»

Basic objectives of academic discipline are:

The goal of the study of academic discipline «Philosophy» is to form the students'

– formation of a modern integral vision of the world, based on humanistic ideals and scientific principles of activity;

– mastery of the fundamentals of world and domestic philosophical culture;

– formation of the ability for creative and critical scientific and practical, rationally oriented thinking, ensuring constructive participation in social, transformative and professional activity.

– formation of a modern style of scientific, practical and rationally oriented thinking;

– the ability to clearly formulate one's socio-political and life position and substantiate them philosophically.

Basic objectives of academic discipline are:

– to develop analytical thinking skills among students;
– develop a methodological culture of research activity;
– show the role of philosophy in the professional activity of a specialist;
– familiarize students with ethical standards of professional activity.

The academic discipline is based on the knowledge gained from studying such disciplines as: "History of Belarusian statehood" and "Political Economy". The knowledge and skills acquired by students while studying this discipline are necessary for mastering subsequent special disciplines related to the design of artificial intelligence systems, automation and management.

As a result of academic discipline studying must

know:

– the main problems of philosophy and the essence of the most important philosophical teachings;

– basic principles of the philosophical concept of being;

– fundamental components of the philosophical theory of man;

– basic values of modern culture;

– sociocultural foundations and basic patterns of human activity (including professional);

– basic principles, laws and mechanisms of cognitive activity, the most important philosophical methods of scientific research;

– basic patterns of functioning and development of society, their features in the modern world;

– the meaning and content of global problems of our time, the main strategies and prospects for their resolution;

be able:

– formulate and argue the main ideas and values of your philosophical worldview;

– apply philosophical ideas and categories in the analysis of sociocultural and professional problems and situations;

– characterize the leading ideas of the philosophical picture of the world, broadcast and popularize them;

– understand and explain different versions of answers to fundamental questions about the meaning of human existence;

– make a meaningful value choice, formulate and argue the axiological regulations of one's life and professional activity;

– apply the ideas of epistemology and the basic methodological regulations of scientific research in the analysis of social and professional problems;

– formulate and argue their ideological and socio-political position, determine the role of their social and professional activities in the functioning and development of the main spheres of society;

– assess the prospects for the development of the most important social problems and the possibilities of innovative activity in the field of the chosen profession for their optimal solution;

have the skill:

– solving theoretical and practical problems;

– systemic and comparative analysis;

– interdisciplinary problem solving.

Mastering this academic discipline ensures the formation of the following competences: «Have a modern culture of thinking, a humanistic worldview», an analytical and innovative-critical style of cognitive, socio-practical and communicative activity, use the foundations of philosophical knowledge in direct professional activity, independently assimilate philosophical knowledge and build a worldview position on their basis."

According to the syllabus for the full-time form of advanced higher education for the study of academic discipline is allocated a total of 108 hours, including 54 in-class hours among them.

The distribution of in-class hours by courses, semesters and types of classes is shown in tables

Table 1.

Full-time higher education						
Translation of Speciality	**Profilisation**	**Course**	**Semes-ter**	**Lec-tures, hours**	**Practical trainings, hours**	**Intermediate assessment form**
6-05-0311-02 Economy and management	Economy and legal support of economic activity	**1**	**1**	**36**	**18**	Exam
6-05-0412-01 Management	Production Management	**1**	**1**	**36**	**18**	Exam
6-05-0412-01 Management	Real estate Management	**1**	**1**	**36**	**18**	Exam
6-05-0412-01 Management	International Management	**1**	**1**	**36**	**18**	Exam
6-05-0412-01 Management	Social-administrative Management	**1**	**1**	**36**	**18**	Exam
6-05-0714-05 Equipment and technologies of pack manufacture, trade and exposition-advertisement objects	Trade equipment and technologies	**1**	**1**	**36**	**18**	Exam
6-05-0714-05 Equipment and technologies of pack manufacture, trade and exposition-advertisement objects	Packaging production	**1**	**1**	**36**	**18**	Exam
6-05-0716-01 Metrology, standartisation and quality control	Metrology, standartisation and quality control in mechanical and instrumentation engineering	**1**	**1**	**36**	**18**	Exam
6-05-0716-03 Information and measure-ment devices and systems	Mechanic and electromechanical devices and sys-tems	**1**	**1**	**36**	**18**	Exam
6-05-0716-03 Information and measure-ment devices and systems	Technology and equipment of jewelry manufactur-ing	**1**	**1**	**36**	**18**	Exam
6-05-0716-04 Optics and electronics and laser technique	Optics and electronics devices and systems	**1**	**1**	**36**	**18**	Exam
6-05-0716-06 Biomedical engineering	Technical means of diagnostics and treatment	**1**	**1**	**36**	**18**	Exam
6-05-0718-01 Engineering Economy	Architecture, construction and economy of real estate	**1**	**1**	**36**	**18**	Exam
6-05-0718-01 Engineering Economy	Digital manufacturing	**1**	**1**	**36**	**18**	Exam
6-05-0718-01 Engineering Economy	Economy and digital technologies in an industrial enterprise	**1**	**1**	**36**	**18**	Exam

Full-time higher education						
Translation of Speciality	**Profilisation**	**Course**	**Semes-ter**	**Lec-tures, hours**	**Practical trainings, hours**	**Intermediate assessment form**
6-05-0718-01 Engineering Economy	Economy and economical safety of industrial enterprise	**1**	**1**	**36**	**18**	Exam
6-05-0718-01 Engineering Economy	Organisation of external economic activity of manufacturing industry	**1**	**1**	**36**	**18**	Exam
6-05-0718-01 Engineering Economy	Innovative projects in an industrial enterprise	**1**	**1**	**36**	**18**	Exam
6-05-0718-01 Engineering Economy	Business-processes of industrial enterprises	**1**	**1**	**36**	**18**	Exam
6-05-0718-01 Engineering Economy	Design projects management in industrial enter-prise	**1**	**1**	**36**	**18**	Exam
6-05-0718-01 Engineering Economy	Utilities and water management	**1**	**1**	**36**	**18**	Exam
6-05-0732-02 Expertise and real estate management		**1**	**1**	**36**	**18**	Exam
7-07-0712-01 Electricity and electrical engineering	Electrical installations, Power plants, substations	**1**	**1**	**36**	**18**	Exam
7-07-0712-01 Electricity and electrical engineering	Electricity Systems and networks	**1**	**1**	**36**	**18**	Exam
7-07-0712-01 Electricity and electrical engineering	Relay protection and automation	**1**	**1**	**36**	**18**	Exam
7-07-0712-01 Electricity and electrical engineering	Electricity supply	**1**	**1**	**36**	**18**	Exam
6-05-0311-02 Economy and management	Economy and management on the industrial enter-prises	**1**	**2**	**36**	**18**	Exam
6-05-0412-02 Business-administration	Business-administration of the organisation	**1**	**2**	**36**	**18**	Exam
6-05-0412-04 Marketing	Marketing of industrial enterprises	**1**	**2**	**36**	**18**	Exam
6-05-0713-04 Automation of technological processes and industries	Computer mechatronics	**1**	**2**	**36**	**18**	Exam
6-05-0713-04 Automation of technological processes and industries	Intelligent devices, machines and manufactures	**1**	**2**	**36**	**18**	Exam
6-05-0713-04 Automation of technological processes and industries	Automated electric actuators	**1**	**2**	**36**	**18**	Exam
6-05-0713-04 Automation of technological processes and industries	Digital machine manufacturing	**1**	**2**	**36**	**18**	Exam
6-05-0714-02 Engineering technology, cut-ting machines and tools	Technical support for engineering production	**1**	**2**	**36**	**18**	Exam

Full-time higher education						
Translation of Speciality	**Profilisation**	**Course**	**Semes-ter**	**Lec-tures, hours**	**Practical trainings, hours**	**Intermediate assessment form**
6-05-0714-02 Engineering technology, cut-ting machines and tools	High- energy technology for machining parts	**1**	**2**	**36**	**18**	Exam
6-05-0714-02 Engineering technology, cut-ting machines and tools	High- energy technology for machining parts	**1**	**2**	**36**	**18**	Exam
6-05-0714-02 Engineering technology, cut-ting machines and tools	Tooling for manufacturing	**1**	**2**	**36**	**18**	Exam
6-05-0714-02 Engineering technology, cut-ting machines and tools	Engineering of technological equipment	**1**	**2**	**36**	**18**	Exam
6-05-0714-08 Industrial design	Design of transport means	**1**	**2**	**36**	**18**	Exam
6-05-0714-08 Industrial design	Industrial design of manufacturing equipment	**1**	**2**	**36**	**18**	Exam
6-05-0715-03 Vehicles, tractors, mobile and technological complexes	Automatic design of vehicles	**1**	**2**	**36**	**18**	Exam
6-05-0715-03 Vehicles, tractors, mobile and technological complexes	Wheel vehicles and specialized transport and tech-nological equipment and systems	**1**	**2**	**36**	**18**	Exam
6-05-0715-03 Vehicles, tractors, mobile and technological complexes	Tractors and mobile complexes	**1**	**2**	**36**	**18**	Exam
6-05-0715-03 Vehicles, tractors, mobile and technological complexes	Electrical and autonomous transport means	**1**	**2**	**36**	**18**	Exam
6-05-0715-03 Vehicles, tractors, mobile and technological complexes	Trucks and cars	**1**	**2**	**36**	**18**	Exam
6-05-0715-03 Vehicles, tractors, mobile and technological complexes	Automotive industry (electronics)	**1**	**2**	**36**	**18**	Exam
6-05-0715-06 Water vehicles	Shipbuilding and technical operation of water transport	**1**	**2**	**36**	**18**	Exam
6-05-0715-07 Operation of land transport and technological machinery and systems	Technical management of road vehicle	**1**	**2**	**36**	**18**	Exam
6-05-0715-07 Operation of land transport and technological machinery and systems	Operation and technical service of road construc-tion machinery and systems	**1**	**2**	**36**	**18**	Exam
6-05-0718-01 Engineering Economy	Transport	**1**	**2**	**36**	**18**	Exam
6-05-0718-01 Engineering Economy	Electricity and heat power	**1**	**2**	**36**	**18**	Exam
6-05-0732-01 Technical maintenance of buildings and facilities	Operation of housing and communal services	**1**	**2**	**36**	**18**	Exam
6-05-1036-01 Customs	Customs logistics	**1**	**2**	**36**	**18**	Exam

Full-time higher education						
Translation of Speciality	**Profilisation**	**Course**	**Semes-ter**	**Lec-tures, hours**	**Practical trainings, hours**	**Intermediate assessment form**
6-05-1036-01 Customs	Economical support of customs activity	**1**	**2**	**36**	**18**	Exam
6-05-1042-01 Transport logistics	Transport logistics systems and supply chain man-agement	**1**	**2**	**36**	**18**	Exam
7-07-0731-02 Architecture design		**1**	**2**	**36**	**18**	Exam
7-07-0732-03 Transport communications building	Motorways	**1**	**2**	**36**	**18**	Exam
7-07-0732-03 Transport communications building	Bridges, transport tunnels and subways	**1**	**2**	**36**	**18**	Exam
6-05-0611-01 Informational systems and technologies	Informational systems and technologies in design and production	**2**	**3**	**36**	**18**	Exam
6-05-0611-01 Informational systems and technologies	Informational systems and technologies (in bank-ing)	**2**	**3**	**36**	**18**	Exam
6-05-0612-01 Software engineering		**2**	**3**	**36**	**18**	Exam
6-05-0714-06 Vacuum, compressor and low-temperature equipment and technolo-gies	Low- temperature technique	**2**	**3**	**36**	**18**	Exam
6-05-0714-06 Vacuum, compressor and low-temperature equipment and technolo-gies	Vacuum and compressor technique	**2**	**3**	**36**	**18**	Exam
6-05-0716-02 Sports engineering	Design and manufacturing of sports technique	**2**	**3**	**36**	**18**	Exam
6-05-0716-02 Sports engineering	Technical support of sports facilities operation	**2**	**3**	**36**	**18**	Exam
6-05-0716-03 Information and measure-ment devices and systems	Information and measurement techniques and technologies	**2**	**3**	**36**	**18**	Exam
6-05-0716-03 Information and measure-ment devices and systems	Information systems and technologies non-destructive control and diagnostics	**2**	**3**	**36**	**18**	Exam
6-05-0716-05 Technical systems of safety provision		**2**	**3**	**36**	**18**	Exam
6-05-0716-08 Micro systems and Nano systems engineering		**2**	**3**	**36**	**18**	Exam
6-05-0719-01 Engineering and pedagogi-cal activity	Construction	**2**	**3**	**36**	**18**	Exam
6-05-0719-01 Engineering and pedagogical activity	Automotive industry	**2**	**3**	**36**	**18**	Exam

Full-time higher education						
Translation of Speciality	**Profilisation**	**Course**	**Semes-ter**	**Lec-tures, hours**	**Practical trainings, hours**	**Intermediate assessment form**
6-05-0719-01 Engineering and pedagogical activity	Mechanical engineering	**2**	**3**	**36**	**18**	Exam
6-05-0719-01 Engineering and pedagogical activity	Applied programming	**2**	**3**	**36**	**18**	Exam
6-05-0731-01 Geodesy		**2**	**3**	**36**	**18**	Exam
7-07-0714-01 Machinery and equipment for mining productions	Mining electromechanics	**2**	**3**	**36**	**18**	Exam
7-07-0724-01 Development of mineral deposits	Open pit mining	**2**	**3**	**36**	**18**	Exam
7-07-0724-01 Development of mineral deposits	Underground mining	**2**	**3**	**36**	**18**	Exam
7-07-0724-01 Development of mineral deposits	Mine surveying	**2**	**3**	**36**	**18**	Exam
7-07-0724-01 Development of mineral deposits	Mineral processing	**2**	**3**	**36**	**18**	Exam
7-07-0732-01 Construction of buildings and facilities	Industrial and Civil engineering	**2**	**3**	**36**	**18**	Exam
7-07-0732-01 Construction of buildings and facilities	Manufacturing of building products and construc-tions	**2**	**3**	**36**	**18**	Exam
7-07-0732-01 Construction of buildings and facilities	Hydrotechnical construction	**2**	**3**	**36**	**18**	Exam
7-07-0732-01 Construction of buildings and facilities	Construction of heat and nuclear power plants	**2**	**3**	**36**	**18**	Exam
7-07-0732-02 Engineering networks, equipment of buildings and facilities	Heat and gas supply, ventilation air protection	**2**	**3**	**36**	**18**	Exam
7-07-0732-02 Engineering networks, equipment of buildings and facilities	Water supply, sanitation and protection of water sources	**2**	**3**	**36**	**18**	Exam
6-05-0713-04 Automation of technological processes and industries	Automation of technological processes and indus-tries in instrumentation and radio electronics	**2**	**4**	**36**	**18**	Exam
6-05-0713-04 Automation of technological processes and industries	Automation of technological processes and indus-tries in energy power	**2**	**4**	**36**	**18**	Exam
6-05-0713-05 Robotics systems	Industrial robots and robotics systems	**2**	**4**	**36**	**18**	Exam
6-05-0714-01 High-temperature metal working technology	Computer-aided design of foundries and metallurgical processes	**2**	**4**	**36**	**18**	Exam
6-05-0714-01 High-temperature metal working technology	Engineering of technological processes in metal-lurgical manufacturing	**2**	**4**	**36**	**18**	Exam

Full-time higher education						
Translation of Speciality	**Profilisation**	**Course**	**Semes-ter**	**Lec-tures, hours**	**Practical trainings, hours**	**Intermediate assessment form**
6-05-0714-01 High-temperature metal working technology	Digital metallurgy and heat treatment	**2**	**4**	**36**	**18**	Exam
6-05-0714-03 Engineering design and manufacture of materials and products	Welding Equipment and technology	**2**	**4**	**36**	**18**	Exam
6-05-0714-03 Engineering design and manufacture of materials and products	Deformation technologies and equipment	**2**	**4**	**36**	**18**	Exam
6-05-0714-03 Engineering design and manufacture of materials and products	Additive manufacturing in foundries	**2**	**4**	**36**	**18**	Exam
6-05-0714-03 Engineering design and manufacture of materials and products	Foundry machinery and technology	**2**	**4**	**36**	**18**	Exam
6-05-0714-03 Engineering design and manufacture of materials and products	Material science in mechanical engineering	**2**	**4**	**36**	**18**	Exam
6-05-0715-04 Hydropneumatic systems of mobile and technological machinery and equipment	Engineering of hydraulic and pneumatic systems of mobile machinery and equipment	**2**	**4**	**36**	**18**	Exam
6-05-0715-05 Power plants	Internal combustion piston engines	**2**	**4**	**36**	**18**	Exam
6-05-0715-10 Technologies of transport processes	Transport organization and management in road and urban transport	**2**	**4**	**36**	**18**	Exam
6-05-0715-12 Road and transport infra-structure operation	Smart road transport infrastructure	**2**	**4**	**36**	**18**	Exam
6-05-1041-01 Traffic management and transport planning	Management and road traffic safety	**2**	**4**	**36**	**18**	Exam
7-07-0712-02 Heat and Power Engineering	Thermal Power plants	**2**	**4**	**36**	**18**	Exam
7-07-0712-02 Heat and Power Engineering	Industrial of Heat and Power energy	**2**	**4**	**36**	**18**	Exam
7-07-0712-02 Heat and Power Engineering	Automation and management of Heat and Power processes	**2**	**4**	**36**	**18**	Exam
7-07-0712-02 Heat and Power Engineering	Energy efficient technologies energetic manage-ment	**2**	**4**	**36**	**18**	Exam
7-07-0712-03 Design and operation of nuclear power plants		**2**	**4**	**36**	**18**	Exam
7-07-0731-01 Architecture		**2**	**4**	**36**	**18**	Exam

– for correspondence forms of higher education for speciality: 6-05-0612-01 Software engineering; 6-05-1042-01 Transport logistics systems and supply chain management; 7-07-0724-01 Open pit mining; 7-07-0724-01 Mineral processing, total of 108 hours, including 12 in-class hours. The distribution of in-class hours by courses, semesters and types of classes is shown in tables.

Table 2.

Correspondence higher education					
Course	**Semester**	**Lectures, hours**	**Laboratory classes**	**Practical trainings**	**Intermediate assessment form**
2	3	8		4	Exam
1	2	8		4	Exam
2	3	8		4	Exam

– for correspondence forms of higher education for speciality: 6-05-0715-07 Technical vehicle maintenance and service; 6-05-0718-01 Architecture, construction and economy of real estate; 6-05-0732-02 Expertise and real estate management, total of 108 hours, including 6 in-class hours. The distribution of in-class hours by courses, semesters and types of classes is shown in tables.

Table 3.

Correspondence higher education					
Course	**Semester**	**Lectures, hours**	**Laboratory classes**	**Practical trainings**	**Intermediate assessment form**
2	3	4		2	Exam
1	2	4		2	Exam

– for correspondence forms of higher education for speciality: 6-05-0716-05 Technical systems of safety provision; 7-07-0712-01 Electrical installations, Power plants, substations; 7-07-0712-01 Electricity Systems and networks; 7-07-0712-02 Thermal Power plants; 7-07-0712-02 Industrial of Heat and Power energy; 7-07-0714-01 Mining electromechanics; 7-07-0732-01 Industrial and Civil engineering; 7-07-0732-01 Manufacturing of building products and constructions; 7-07-0732-02 Heat and gas supply, ventilation air protection; 7-07-0732-02 Water supply, sanitation and protection of water sources, total of 108 hours, including 10 in-class hours. The distribution of in-class hours by courses, semesters and types of classes is shown in tables.

Table 4.

Correspondence higher education					
Course	**Semester**	**Lectures, hours**	**Laboratory classes**	**Practical trainings**	**Intermediate assessment form**
1	2	6		4	Exam
2	3	6		4	Exam

– for correspondence forms of higher education for speciality: 6-05-0311-02 Economy and legal support of economic activities, total of 108 hours, including 16 in-class hours. The distribution of in-class hours by courses, semesters and types of classes is shown in tables.

Table 5.

Correspondence higher education					
Course	**Semester**	**Lectures, hours**	**Laboratory classes**	**Practical trainings**	**Intermediate assessment form**
1	2	10		6	Exam

– for correspondence forms of higher education for speciality: 7-07-0732-03 Motorways, total of 108 hours, including 8 in-class hours.

The distribution of in-class hours by courses, semesters and types of classes is shown in tables.

Table 6.

Correspondence higher education					
Course	**Semester**	**Lectures, hours**	**Laboratory classes**	**Practical trainings**	**Intermediate assessment form**
2	3	6		2	Exam

– for correspondence forms of higher education integrated with secondary specialized education for a speciality: 6-05-0714-03 Engineering design and manufacture of materials and products; 6-05-0714-03 Deformation technologies and equipment; 6-05-0715-05 Trucks and cars; 6-05-0715-05 Internal combustion piston engines; 6-05-1042-01 Transport logistics systems and supply chain management, 108 hours, including 12 in-class hours.

The distribution of in-class hours by courses, semesters and types of classes is shown in tables.

Table 7.

Correspondence form of higher education integrated with secondary specialized education					
Course	**Semester**	**Lectures, hours**	**Laboratory classes**	**Practical trainings**	**Intermediate assessment form**
2	4	4		8	Exam
1	2	8		4	Exam
2	3	8		4	Exam

– for correspondence forms of higher education integrated with secondary specialized education for a speciality: 6-05-0714-02 Technical support for engineering production; 6-05-0714-02 Engineering of technological equipment; 6-05-0715-07 Technical vehicle maintenance and service; 6-05-0731-01 Engineering Geodesy; 7-07-0712-01 Electricity supply; 7-07-0712-02 Industrial of Heat and Power energy; 6-05-0718-01 Business-processes of industrial enterprises, total of 108 hours, including 6 in-class hours.

The distribution of in-class hours by courses, semesters and types of classes is shown in tables.

Table 8.

Correspondence form of higher education integrated with secondary specialized education					
Course	**Semester**	**Lectures, hours**	**Laboratory classes**	**Practical trainings**	**Intermediate assessment form**
1	2	4		2	Exam
1	1	4		2	Exam
2	4	4		2	Exam
1	1	6			Exam

– for correspondence forms of higher education integrated with secondary specialized education for a speciality: 6-05-0714-03 Welding Equipment and technology; 6-05-0714-06 Vacuum and compressor technique; 6-05-0715-10 Transport organization and management in road and urban transport; 6-05-0719-01 Construction; 6-05-0719-01 Mechanical engineering; 7-07-0732-01 Industrial and Civil engineering; 7-07-0732-02 Water supply, sanitation and protection of water sources, total of 108 hours, including 10 in-class hours.

The distribution of in-class hours by courses, semesters and types of classes is shown in tables.

Table 9.

Correspondence form of higher education integrated with secondary specialized education					
Course	**Semester**	**Lectures, hours**	**Laboratory classes**	**Practical trainings**	**Intermediate assessment form**
2	**3**	**6**		**4**	**Exam**
2	4	6		4	Exam
1	2	6		4	Exam

– for correspondence forms of higher education integrated with secondary specialized education for a speciality: 6-05-0716-03 Information and measurement techniques and technologies; 6-05-0716-03 Mechanic and electromechanical devices and systems; 6-05-0716-05 Technical systems of safety provision; 6-05-0716-08 Micro systems and Nano systems engineering; 7-07-0712-02 Energy efficient technologies energetic management; 6-05-0412-01 Social-administrative Management, total of 108 hours, including 8 in-class hours.

The distribution of in-class hours by courses, semesters and types of classes is shown in tables.

Table 10.

Correspondence form of higher education integrated with secondary specialized education					
Course	**Semester**	**Lectures, hours**	**Laboratory classes**	**Practical trainings**	**Intermediate assessment form**
2	4	4		4	Exam
1	1	4		4	Exam
2	4	4		4	Exam
1	2	4		4	Exam
2	4	6		2	Exam
1	1	6		2	Exam

– for correspondence forms of higher education integrated with secondary specialized education for speciality: 6-05-0713-04 Automated electric actuators, total of 108 hours, including 14 in-class hours. The distribution of in-class hours by courses, semesters and types of classes is shown in tables.

Table 11.

Correspondence form of higher education integrated with secondary specialized education					
Course	**Semester**	**Lectures, hours**	**Laboratory classes**	**Practical trainings**	**Intermediate assessment form**
1	2	12		2	Exam

– for correspondence forms of higher education integrated with secondary specialized education for a speciality: 7-07-0731-01 Architecture, total of 108 hours, including 54 in-class hours. The distribution of in-class hours by courses, semesters and types of classes is shown in tables.

Table 12.

Correspondence form of higher education integrated with secondary specialized education					
Course	**Semester**	**Lectures, hours**	**Laboratory classes**	**Practical trainings**	**Intermediate assessment form**
1	2	36		18	Exam

Learning material content

Unit I Formation and development of philosophy

Topic 1.1. Philosophy and worldview

The concept of worldview.

Knowledge, values and emotional-sensory components in the structure of worldview.

Historical types of worldviews.

The formation and functions of philosophy as a rational-theoretical worldview.

Interrelation of ontological, epistemological, anthropological, axiological problems.

Philosophical categories and universals of culture.

Reflexivity, criticality, creative nature of philosophical thinking.

Competency requirements:

– be able to substantiate the relationship between philosophy and worldview;

– know and be able to characterize the main historical types of worldviews, its components;

– know the problem field of philosophy, the main philosophical categories and universals of culture, the functions of philosophy as a sociocultural phenomenon;

– know and be able to substantiate the fundamental characteristics of philosophy, the creative nature of philosophical thinking;

– be able to reveal the relationship between philosophy and science, art, morality, religion, and other cultural phenomena.

Topic 1.2. Genesis of philosophical knowledge. Main directions of philosophy.

Socio-historical and cultural prerequisites for the emergence of philosophy.

The formation of philosophy in the cultures of the ancient East.

The nature of ancient Greek culture and features of the ancient philosophical tradition. Cosmocentrism of ancient philosophical thinking. The problem comes from the beginning. Atomism concept. Socrates, Plato, Aristotle.

Status and functions of philosophy in medieval European culture. The relationship between reason and faith. Discussions about the nature of universals: nominalism, realism.

Philosophy of the Renaissance. Humanism. Pantheism.

Philosophy and science in modern European culture. Development of natural science and the problem of method. F. Bacon. R. Descartes.

Philosophical thought of the Enlightenment. Concepts of “natural rights” of man and “social contract”. Materialistic ideas.

German classical philosophy. Critical philosophy of I. Kant. Dialectical philosophy of G. Hegel.

Origins and main features of the philosophy of K. Marx.

Criticism of philosophical classics, elements of irrationalism, other non-classical features of the philosophical teachings of A. Schopenhauer, S. Kierkegaard, F. Nietzsche.

Classical positivism. Neopositivism. Postpositivism.

Philosophy of existentialism.

Phenomenology.

Philosophical hermeneutics.

Philosophy of postmodernism.

Philosophical ideas of synergetics.

Competency requirements:

– know the basic socio-historical and cultural prerequisites for the emergence of philosophy;

– know the specifics of the philosophical tradition of ancient India and ancient China;

– know the features and basic concepts of ancient philosophy, be able to characterize its leading ideas;

– know the main problems and ideas of medieval philosophy, the Renaissance, the New Age, the Enlightenment;

– know the philosophical teachings of I. Kant, G. Hegel, K. Marx, be able to characterize their role in the development of European and world philosophical thought;

– be able to apply the ideas and categories of classical philosophy in the analysis of ideological and sociocultural problems.

– know and be able to characterize the basic philosophical ideas of non-classical philosophy;

– be able to compare classics and modernity as two eras in the development of European philosophy.

Topic 1.3. Philosophical thought of Belarus

The main stages of the development of philosophical thought in Belarus, its socio-philosophical and humanistic ideas.

Philosophy of the Middle Ages: K. Smalyatich, K. Turovsky, E. Polotskaya.

Philosophy of the Renaissance: F. Skarina, S. Budny, N. Gusovsky.

Philosophy of modern times: S. Polotsky, I. Kopievich, N. Lossky.

Competency requirements:

– know the main stages of the development of philosophical thought in Belarus;

– know the essence of the most important philosophical ideas in Belarus of various historical periods;

– be able to characterize the connection of philosophical thought with the culture and social life of Belarus in modern conditions.

Unit II Philosophical understanding of the problems of existence

Topic 2.1. Ontology and philosophy of nature.

Ontology as a philosophical doctrine of being. Category of matter. Systemic organization of life. Movement as an attribute of being.

Dialectics as a philosophical theory of development.

Spatio-temporal organization of existence.

Nature concept. Natural and artificial habitat.

Global problems and prospects for humanity.

Competency requirements:

– know and understand the main aspects of the philosophical concept of being;

– be able to characterize the systemic organization of existence;

– know the content of global problems and be able to characterize the main ways to solve them.

Topic 2.2. Philosophical understanding of the problem of development. Dialectics and synergetics.

Dialectics as a philosophical theory of development. Dialectics and synergetics.

Spatio-temporal organization of existence.

Nature concept.

Natural and artificial habitat.

Global problems and prospects for humanity.

Competency requirements:

– know and understand the main aspects of the philosophical concept of being;

– be able to characterize the systemic organization of existence;

– know the content of global problems;

– be able to characterize the main ways to solve them.

Unit III Philosophical Anthropology

Topic 3.1. The problem of man in philosophy and science.

Philosophical and anthropological aspects.

Basic strategies for understanding man in philosophy

Activity. Practice.

Evolution of reflection forms. Thinking and consciousness.

Competency requirements:

– know the fundamental components of philosophical and anthropological teachings;

– know and be able to take into account the sociocultural parameters of human activity;

– be able to make one's own life choices, formulate and argue the basic guidelines for one's life and professional activities.

Topic 3.2. Human consciousness as a subject of philosophical analysis. The problem of artificial intelligence

Basic ideas of philosophical anthropology.

Anthropological ideas of existentialism and personalism

Essence and existence; freedom and responsibility.

Philosophical and anthropological aspects of psychoanalysis. Activity. Practice.

Evolution of reflection forms. Thinking and consciousness.

Competency requirements:

– know the fundamental components of philosophical and anthropological teachings;

– know and be able to take into account the sociocultural parameters of human activity;

– be able to make one's own life choices, formulate and argue the basic guidelines for one's life and professional activities.

Unit IV Social philosophy

Topic 4.1. Society as a developing system

Features of cognition of social reality.

The main spheres of public life, their relationship.

Civil society and the state.

Spiritual life of society.

Social sphere of public life.

The relationship between philosophy and specific social and human sciences.

Engineering and technology, their role in the life of society.

Philosophy of values.

Competency requirements:

– know the leading ideas of social philosophy;

– know the general structure of social life, be able to characterize its dynamics;

– be able to determine the meaning, goals, objectives and humanistic parameters of their social and professional activity;

– be able to formulate and argue your social position.

Topic 4.2. Prospects and risks of modern civilization

Development of society as a civilizational process.

The concept of civilization. Types of civilizations in the history of society

The concept of engineering and technology.

Problems and risks of consumer society.

The problem of security at different levels of social reality.

Prospects for the development of civilization and modern strategies of sociodynamics.

Technogenic civilization as one of the historical modifications

Competency requirements:

– know the leading ideas of social philosophy;

– know the general structure of social life, be able to characterize its dynamics;

– be able to determine the meaning, goals, objectives and humanistic parameters of their social and professional activity;

– be able to formulate and argue your social position.

Topic 4.3. Belarus in the modern civilizational process

Republic of Belarus, in the paradigm of industrial activity.

Agrarian and industrial complexes based on the institutional mechanism of state ownership.

Resources for technological modernization through Union State projects.

Industrial and energy cooperation with the Russian Federation.

Philosophy of Eurasian integration.

Competency requirements:

– know the main stages of the development of modern philosophical thought in Belarus;

– know the essence of the philosophy of Eurasian integration;

– be able to characterize the connection between philosophical thought and the features of a smart society and smart industry.

Unit V Theory of knowledge and philosophy of science

Topic 5.1 The variety of forms of knowledge and the problem of truth in philosophy

The specificity of a person's cognitive attitude to the world and the variety of types of cognitive activity.

The structure of the cognitive process. Subject and object of knowledge. Basic forms of sensory and rational knowledge.

Cognition as creativity. The role of imagination and intuition in the cognitive process.

Knowledge as the comprehension of truth. Concepts of truth.

Science as an activity, a social institution and a knowledge system.

Empirical and theoretical levels of scientific knowledge. Methods of scientific research. Forms of scientific knowledge.

Scientific picture of the world. Scientific revolutions and changes in types of rationality.

Competency requirements:

– know the basic characteristics of cognitive activity;

– know the levels of scientific knowledge, methods of scientific research;

– be able to carry out a philosophical analysis of cognitive activity when considering ideological, sociocultural and professional problems and situations.

Topic 5.2 Science and its sociocultural status

Science as an activity, a knowledge system and a social institution.

Specificity of scientific activity, subject, means and methods, object of scientific knowledge.

Levels of organization of scientific research: empirical and theoretical.

Full cycle of scientific research - R&D.

Functions of science in industrial, post-industrial and information society.

The phenomenon of pseudoscientific and parascientific knowledge in modern society.

Humanitarian parameters of modern science.

Competency requirements:

– know the basic characteristics of cognitive activity;

– know the levels of scientific knowledge, methods of scientific research;

– be able to carry out a philosophical analysis of cognitive activity when considering ideological, sociocultural and professional problems and situations.

Topic 5.3. Philosophy in the professional activity of a specialist

Creative freedom and social responsibility of a scientist.

Ethics of science and its role in the formation of a modern type of scientific rationality.

Engineering ecology of the new industrial paradigm, as a result of adapting the activities of industrial companies to national legislation in the field of ecology and environmental protection.

Legal aspect of environmental protection.

Strict environmental engineering criteria for manufacturers of automotive and aviation equipment, as well as the chemical and energy industries.

Competency requirements:

– know the main characteristics of engineering activities;

– know the structure of R&D;

– be able to carry out a philosophical analysis of engineering activities when considering ideological, sociocultural and professional problems and situations.

EDUCATIONAL AND METHODICAL MAP OF THE ACADEMIC DISCIPLINE

Full-time form of higher education

Unit and tropic number	Name of units and topics	In-class hours			Individual work, hours	Knowledge control form
		Lectures hours	Practical trainings	Laboratory classes		
1	2	3	4	6	8	9
	*** semester**					
1.	**Formation and development of philosophy**					
1.1	Philosophy and worldview	4			4	
	Practical training № 1. Philosophy and worldview		2		2	Written survey
1.2	Genesis of philosophical knowledge. Basic directions of philosophy	6			4	
	Practical training № 2. Basic directions of philosophy		2		2	Oral survey
1.3	Philosophical thought of Belarus	4			4	
	Practical training № 3. Philosophical thought of Belarus		2		2	Writing an essay
2.	**Philosophical understanding of the problems of existence**					
2.1	Ontology and philosophy of nature	2			2	
	Practical training № 4. Ontology and philosophy of nature		2		2	Writing an essay
2.2	Philosophical understanding of the problem development. Dialectics and synergetics	2			2	
	Practical training № 5. Dialectics and synergetics		2		2	Written survey
3	**Philosophical anthropology**					
3.1	The problem of man in philosophy and science	2			2	
3.2	Human consciousness as a subject of philosophical analysis. The problem of artificial intelligence	2			2	
	Practical training № 6. Artificial intelligence problem		2		2	Writing an essay

4.	**Social philosophy**					
4.1	Society as a developing system	4			4	
	Practical training № 7. Society as a developing system		2		2	Oral survey
4.2	Prospects and risks of modern civilization	2			2	
4.3	Belarus in the modern civilizational process	2			2	
	Practical training № 8. Belarus in the modern civilizational process		2		2	Writing an essay
5.	**Theory of knowledge and philosophy of science**					
5.1	The variety of forms of knowledge and the problem of truth in philosophy	2			2	
5.2	Science and its sociocultural status	2			2	
5.3	Philosophy in the professional activity of a specialist (variable component)	2			2	
	Practical training № 9. Philosophy in the professional activity of a specialist		2		4	Oral survey
	Total for the semester	36	18		54	
	Total in-class hours	54				

* According to the academic programme speciality (Table 1).

EDUCATIONAL AND METHODICAL MAP OF THE ACADEMIC DISCIPLINE

Correspondence form of higher education [1]

6-05-0612-01 Software engineering.

Unit and tropic number	Name of units and topics	In-class hours			Individual work, hours	Knowledge control form
		Lectures hours	Practical trainings	Laboratory classes		
1	2	3	4	6	8	9
	*** Semester**					
1.	**Formation and development of philosophy**					
1.1	Philosophy and worldview	2				
	Practical training № 1. Philosophy and worldview		2			Written survey
2.	**Philosophical understanding of the problems of existence**					
2.1	Ontology and philosophy of nature	2				
3	**Philosophical anthropology**					
3.1	The problem of man in philosophy and science	2				
4.	**Social philosophy**					
	Practical training № 8. Belarus in the modern civilizational process		2			Writing an essay
5.	**Theory of knowledge and philosophy of science**					
5.1	The variety of forms of knowledge and the problem of truth in philosophy	2				
	Test for section 5. Theory of knowledge and philosophy of science					Test
	Total in Semester	8	4		96	
	Total in-class hours	12				

180

[1] Topics of learning material, not specified in the Educational and methodical map, are assigned for individual study by the student.

EDUCATIONAL AND METHODICAL MAP OF THE ACADEMIC DISCIPLINE
Correspondence form of higher education

6-05-1042-01 Transport logistics systems and supply chain management; 7-07-0724-01 Underground mining; 7-07-0724-01 Mineral processing.

Unit and tropic number	Name of units and topics	In-class hours			Individual work, hours	Knowledge control form
		Lectures hours	Practical trainings	Laboratory classes		
1	2	3	4	6	8	9
	*** Semester**					
1.	**Formation and development of philosophy**					
1.1	Philosophy and worldview	2				
	Practical training № 1. Philosophy and worldview		2			Written survey
2.	**Philosophical understanding of the problems of existence**					
2.1	Ontology and philosophy of nature	2				
3	**Philosophical anthropology**					
3.1	The problem of man in philosophy and science	2				
4.	**Social philosophy**					
	Practical training № 8. Belarus in the modern civilizational process		2			Writing an essay
5.	**Theory of knowledge and philosophy of science**					
5.1	The variety of forms of knowledge and the problem of truth in philosophy	2				
	Total for the semester	8	4		96	
	Total in-class hours	12				

EDUCATIONAL AND METHODICAL MAP OF THE ACADEMIC DISCIPLINE
Correspondence form of higher education

6-05-0715-07 Technical vehicle maintenance and service; 6-05-0718-01 Architecture, construction and economy of real estate; 6-05-0732-02 Expertise and real estate management.

Unit and tropic number	Name of units and topics	In-class hours			Individual work, hours	Knowledge control form
		Lectures hours	Practical train-ings	Laboratory classes		
1	2	3	4	6	8	9
	*** Semester**					
1.	**Formation and development of philosophy**					
1.1	Philosophy and worldview	2				
	Practical training № 1. Philosophy and worldview		2			Written survey
3	**Philosophical anthropology**					
3.1	The problem of man in philosophy and science	2				
	Total for the semester	4	2		102	
	Total in-class hours	6				

EDUCATIONAL AND METHODICAL MAP OF THE ACADEMIC DISCIPLINE

Correspondence form of higher education

6-05-0716-05 Technical systems of safety provision; 7-07-0712-01 Electrical installations, Power plants, substations; 7-07-0712-01 Electricity Systems and networks; 7-07-0712-02 Тепловые электрические станции; 7-07-0712-02 Industrial of Heat and Power energy; 7-07-0714-01 Mining electromechanics; 7-07-0732-01 Industrial and Civil engineering; 7-07-0732-01 Manufacturing of building products and constructions; 7-07-0732-02 Heat and gas supply, ventilation air protection; 7-07-0732-02 Water supply, sanitation and protection of water sources.

Unit and tropic number	Name of units and topics	In-class hours			Individual work, hours	Knowledge control form
		Lectures hours	Practical trainings	Laboratory classes		
1	2	3	4	6	8	9
	*** Semester**					
1.	**Formation and development of philosophy**					
1.1	Philosophy and worldview	2				
	Practical training № 1. Philosophy and worldview		2			Written survey
2.	**Philosophical understanding of the problems of existence**					
2.1	Ontology and philosophy of nature	2				
4.	**Social philosophy**					
	Practical training № 8. Belarus in the modern civilizational process		2			Writing an essay
5.	**Theory of knowledge and philosophy of science**					
5.1	The variety of forms of knowledge and the problem of truth in philosophy	2				
	Total for the semester	6	4		98	
	Total in-class hours	10				

EDUCATIONAL AND METHODICAL MAP OF THE ACADEMIC DISCIPLINE
Correspondence form of higher education

6-05-0311-02 Economy and legal support of economic activity

Unit and tropic number	Name of units and topics	In-class hours			Individual work, hours	Knowledge control form
		Lectures hours	Practical trainings	Laboratory classes		
1	2	3	4	6	8	9
	*** Semester**					
1.	**Formation and development of philosophy**					
1.1	Philosophy and worldview	2				
	Practical training № 1. Philosophy and worldview		2			Written survey
1.3	Philosophical thought of Belarus	2				
2.	**Philosophical understanding of the problems of existence**					
2.1	Ontology and philosophy of nature	2				
	Practical training № 2. Basic directions of philosophy		2			Oral survey
4.	**Social philosophy**					
4.1	Society as a developing system	2				
	Practical training No 8. Belarus in the modern civilizational process		2			Writing an essay
5.	**Theory of knowledge and philosophy of science**					
5.1	The variety of forms of knowledge and the problem of truth in philosophy	2				
	Total for the semester	10	6		92	
	Total in-class hours	16				

EDUCATIONAL AND METHODICAL MAP OF THE ACADEMIC DISCIPLINE
Correspondence form of higher education

7-07-0732-03 Motorways

Unit and tropic number	Name of units and topics	In-class hours			Individual work, hours	Knowledge control form
		Lectures hours	Practical train-ings	Laboratory classes		
1	2	3	4	6	8	9
	*** Semester**					
1.	**Formation and development of philosophy**					
1.1	Philosophy and worldview	2				
	Practical training № 1. Philosophy and worldview		2			Written survey
1.3	Philosophical thought of Belarus	2				
5.	**Theory of knowledge and philosophy of science**					
5.1	The variety of form of knowledge and the problem of truth in philosophy	2				
	Total for the semester	6	2		100	
	Total in-class hours	8				

EDUCATIONAL AND METHODICAL MAP OF THE ACADEMIC DISCIPLINE

Correspondence form of higher education integrated with secondary specialized education

6-05-0714-03 Engineering design and manufacture of materials and products; 6-05-0714-03 Deformation technologies and equipment; 6-05-0715-05 Trucks and cars; 6-05-0715-05 Internal combustion piston engines; 6-05-1042-01 Transport logistics systems and supply chain management.

Unit and tropic number	Name of units and topics	In-class hours			Individual work, hours	Knowledge control form
		Lectures hours	Practical trainings	Laboratory classes		
1	2	3	4	6	8	9
	*** Semester**					
1.	**Formation and development of philosophy**					
1.1	Philosophy and worldview	2				
	Practical training № 1. Philosophy and worldview		2			Written survey
2.	**Philosophical understanding of the problems of existence**					
2.1	Ontology and philosophy of nature	2				
3	**Philosophical anthropology**					
3.1	The problem of man in philosophy and science	2				
4.	**Social philosophy**					
	Practical training № 8. Belarus in the modern civilizational process		2			Writing an essay
5.	**Theory of knowledge and philosophy of science**					
5.1	The variety of forms of knowledge and the problem of truth in philosophy	2				
	Total for the semester	8	4		96	
	Total in-class hours	12				

EDUCATIONAL AND METHODICAL MAP OF THE ACADEMIC DISCIPLINE

Correspondence form of higher education integrated with secondary specialized education

6-05-0714-02 Technical support for engineering production; 6-05-0714-02 Engineering of technological equipment; 6-05-0715-07 Technical vehicle maintenance and service; 6-05-0731-01 Geodesy; 7-07-0712-01 Electricity supply; 7-07-0712-02 Industrial of Heat and Power energy; 6-05-0718-01 Business-processes of industrial enterprises.

Unit and tropic number	Name of units and topics	In-class hours			Individual work, hours	Knowledge control form
		Lectures hours	Practical trainings	Laboratory classes		
1	2	3	4	6	8	9
	*** Semester**					
1.	**Formation and development of philosophy**					
1.1	Philosophy and worldview	2				
	Practical training № 1. Philosophy and worldview		2			Written survey
3	**Philosophical anthropology**					
3.1	The problem of man in philosophy and science	2				
	Total for the semester	4	2		102	
	Total in-class hours	6				

EDUCATIONAL AND METHODICAL MAP OF THE ACADEMIC DISCIPLINE

Correspondence form of higher education integrated with secondary specialized education

6-05-0714-03 Welding Equipment and technology; 6-05-0714-06 Vacuum and compressor technique; 6-05-0715-10 Transport organization and management in road and urban transport; 6-05-0719-01 Construction; 6-05-0719-01 Mechanical engineering; 7-07-0732-01 Industrial and Civil engineering; 7-07-0732-02 Water supply, sanitation and protection of water sources.

Unit and tropic number	Name of units and topics	In-class hours			Individual work, hours	Knowledge control form
		Lectures hours	Practical trainings	Laboratory classes		
1	2	3	4	6	8	9
	*** Semester**					
1.	**Formation and development of philosophy**					
1.1	Philosophy and worldview	2				
	Practical training № 1. Philosophy and worldview		2			Written survey
2.	**Philosophical understanding of the problems of existence**					
2.1	Ontology and philosophy of nature	2				
4.	**Social philosophy**					
	Practical training № 8. Belarus in the modern civilizational process		2			Writing an essay
5.	**Theory of knowledge and philosophy of science**					
5.1	The variety of forms of knowledge and the problem of truth in philosophy	2				
	Total for the semester	6	4		98	
	Total in-class hours	10				

EDUCATIONAL AND METHODICAL MAP OF THE ACADEMIC DISCIPLINE

Correspondence form of higher education integrated with secondary specialized education

6-05-0716-03 Information and measurement techniques and technologies; 6-05-0716-03 Mechanic and electromechanical devices and systems; 6-05-0716-05 Technical systems of safety provision; 6-05-0716-08 Micro systems and Nano systems engineering; 7-07-0712-02 Energy efficient technologies energetic management; 6-05-0412-01 Social-administrative Management.

Unit and tropic number	Name of units and topics	In-class hours			Individual work, hours	Knowledge control form
		Lectures hours	Practical trainings	Laboratory classes		
1	2	3	4	6	8	9
	*** Semester**					
1.	**Formation and development of philosophy**					
1.1	Philosophy and worldview	2				
	Practical training № 1. Philosophy and worldview		2			Written survey
1.3	Philosophical thought of Belarus	2				
5.	**Theory of knowledge and philosophy of science**					
5.1	The variety of forms of knowledge and the problem of truth in philosophy	2				
	Total for the semester	6	2		100	
	Total in-class hours	8				

EDUCATIONAL AND METHODICAL MAP OF THE ACADEMIC DISCIPLINE
Correspondence form of higher education integrated with secondary specialized education

6-05-0713-04 Automated electric actuators.

Unit and tropic number	Name of units and topics	In-class hours			Individual work, hours	Knowledge control form
		Lectures hours	Practical trainings	Laboratory classes		
1	2	3	4	6	8	9
	*** Semester**					
1.	**Formation and development of philosophy**					
1.1	Philosophy and worldview	2				
	Practical training № 1. Philosophy and worldview		2			Written survey
2.	**Philosophical understanding of the problems of existence**					
2.1	Ontology and philosophy of nature	2				
3	**Philosophical anthropology**					
3.1	The problem of man in philosophy and science	2				
4.	**Social philosophy**					
4.1	Society as a developing system	2				
4.3	Belarus in the modern civilizational process	2				
5.	**Theory of knowledge and philosophy of science**					
5.1	The variety of forms of knowledge and the problem of truth in philosophy	2				
	Total for the semester	12	2		94	
	Total in-class hours	14				

190

EDUCATIONAL AND METHODICAL MAP OF THE ACADEMIC DISCIPLINE
Correspondence form of higher education integrated with secondary specialized education

7-07-0731-01 Architecture.

Unit and tropic number	Name of units and topics	In-class hours			Individual work, hours	Knowledge control form
		Lectures hours	Practical train-ings	Laboratory classes		
1	2	3	4	6	8	9
	*** Semester**					
1.	**Formation and development of philosophy**					
1.1	Philosophy and worldview	4				
	Practical training № 1. Philosophy and worldview		2			Written survey
1.2	Genesis of philosophical knowledge. Basic directions of philosophy	6				
	Practical training № 2. Basic directions of philosophy		2			Oral survey
1.3	Philosophical thought of Belarus	4				
	Practical training № 3. Philosophical thought of Belarus		2			Writing an essay
2.	**Philosophical understanding of the problems of existence**					
2.1	Ontology and philosophy of nature	2				
	Practical training № 4. Ontology and philosophy of nature		2			Writing an essay
2.2	Philosophical understanding of the problem development. Dialectics and synergetics	2				
	Practical training № 5. Dialectics and synergetics		2			Written survey

Unit and tropic number	Name of units and topics	In-class hours			Individual work, hours	Knowledge control form
		Lectures hours	Practical trainings	Laboratory classes		
1	2	3	4	6	8	9
	*** Semester**					
3	**Philosophical anthropology**					
3.1	The problem of man in philosophy and science	2				
3.2	Human consciousness as a subject of philosophical analysis. The problem of artificial intelligence	2				
	Practical training № 6. Artificial intelligence problem		2			Writing an essay
4.	**Social philosophy**					
4.1	Society as a developing system	4				
	Practical training № 7. Society as a developing system		2			Oral survey
4.2	Prospects and risks of modern civilization	2				
4.3	Belarus in the modern civilizational process	2				
	Practical training № 8. Belarus in the modern civilizational process		2			Writing an essay
5.	**Theory of knowledge and philosophy of science**					
5.1	The variety of forms of knowledge and the problem of truth in philosophy	2				
5.2	Science and its sociocultural status	2				
5.3	Philosophy in the professional activity of a specialist (variable component)	2				
	Practical training № 9. Philosophy in the professional activity of a specialist		2			Oral survey
	Total for the semester	36	18		54	
	Total in-class hours	54				

INFORMATION AND METHODICAL PART

Literature list

Basic literature

1. Loiko, A. I. Philosophy [Electronic Resource]: textbook on the general educational discipline "Philosophy" for students of all specialties / A. I. Loiko, E. K. Bulygo, O. M. Drozdovich ; Belarusian National Technical University, Department of «Philosophical Doctrines». – Minsk: BNTU, 2023. – Деп. в БНТУ 16.05.2023, № DEPBNTU-2023-129.
https://rep.bntu.by/bitstream/handle/data/128183/Philosophy.pdf?sequence=1&isAllowed=y

2. Loiko, A. I. Digital ethics [Electronic Resource]: textbook on the general educational discipline "Philosophy" for students of all specialties / A. I. Loiko; Belarusian National Technical University, Department of «Philosophical Doctrines». – Minsk: BNTU, 2023. – Деп. в БНТУ 26.04.2023, № DEPBNTU-2023
https://rep.bntu.by/bitstream/handle/data/127399/Digital_ethics.pdf?sequence=1&isAllowed=y

3. Loiko, A. I. Philosophy: digital humanities [Electronic Resource]: textbook on general education discipline "Philosophy" for students of all specialties / A. I. Loiko; Belarusian National Technical University, Department of «Philosophical Doctrines». – Minsk: BNTU, 2023. – Деп. в БНТУ 23.06.2023, № DEPBNTU-2023-142.
https://rep.bntu.by/bitstream/handle/data/129771/Philosophy_digital_humanities.pdf?sequence=1&isAllowed=y

4. Loiko, A. I. Philosophy of digital economy [Electronic Resource]: textbook on academic discipline "Philosophy" For students, listeners mastering the content educational program of higher education of the 1st stage for all specialties full-time and part-time forms of education / A. I. Loiko; Belarusian National Technical University, Department of «Philosophical Teachings». – Minsk: BNTU, 2023. – Деп. в БНТУ 15.02.2023, № DEPBNTU-2023-107.
https://rep.bntu.by/bitstream/handle/data/126236/Philosophy_of_digital_economy.pdf?sequence=1&isAllowed=y

Additional literature

1. Cyber security philosophy and methodology [Electronic Resource]: textbook on general education discipline "Philosophy and Methodology of Science"

for students all forms of education / A. I. Loiko; Belarusian National Technical University, Department of «Philosophical Teachings». – Minsk : BNTU, 2023. – Деп. в БНТУ 13.12.2023, № DEPBNTU-2023-172.

https://rep.bntu.by/bitstream/handle/data/138413/Cyber_security_philosophy.pdf?sequence=1&isAllowed

2. Loiko, A. I. Philosophy of cross cultural communication [Electronic Resource]: textbook on general education discipline "Philosophy and Methodology of Science" for students all specialties of full-time and part-time forms of education / A. I. Loiko; Belarusian National Technical University, Department of «Philosophical Teachings». – Minsk: BNTU, 2023. – Деп. в БНТУ 18.09.2023, № DEPBNTU-2023-154.

https://rep.bntu.by/bitstream/handle/data/135380/Philosophy_of_cross.pdf?sequence=1&isAllowed=y

3. Loiko, A. I. Design philosophy: digital technologies [Electronic Resource]: textbook on general education discipline "Philosophy and Methodology of Science" for students, listeners mastering the content educational program of higher education in all specialties of full-time and part-time forms of education / A. I. Loiko; Belarusian National Technical University, Department of «Philosophical Teachings». – Minsk: BNTU, 2023. – Деп. в БНТУ 27.03.2023, № DEPBNTU-2023-111.

https://rep.bntu.by/bitstream/handle/data/126475/Design_philosophy.pdf?sequence=1&isAllowed=y

4. Loiko, A. I. Digital anthropology [Electronic Resource]: textbook on general educational discipline "Philosophy and Methodology of Science" for students, listeners mastering the content of the educational program of higher education of the II stage for all specialties full-time and part-time forms of education / A. I. Loiko; Belarusian National Technical University, Department of «Philosophical Teachings». – Minsk: BNTU, 2023. – Деп. в БНТУ 04.01.2023, № DEPBNTU-2023-102.

https://rep.bntu.by/bitstream/handle/data/124686/Digital_anthropology.pdf?sequence=1&isAllowed=y

5. Loiko, A. I. Philosophy of cognitive technology [Electronic Resource]: textbook for general educational discipline "Philosophy and Methodology of Science" for students, listeners mastering the content of the educational program of higher education of the II stage for all specialities full-time and part-time forms of

education / A. I. Loiko; Belarusian National Technical University, Department of «Philosophical Teachings». – Minsk: BNTU, 2022. – Деп. в БНТУ 16.09.2022, № DEPBNTU-2022-84.

https://rep.bntu.by/bitstream/handle/data/119056/Philosophy.pdf?sequence=1&isAllowed=y

6. Loiko, A. I. Philosophy of digital technology [Electronic Resource]: textbook for general educational discipline "Philosophy and Methodology of Science", for students, listeners mastering the content of the educational program of higher education of the II stage, for all specialties full-time and part-time forms of education / A. I. Loiko; Belarusian National Technical University, Department of «Philosophical Teachings». – Minsk: BNTU, 2022. – Деп. в БНТУ 23.02.2022, № DEPBNTU-2022-51.

https://rep.bntu.by/bitstream/handle/data/109830/Philosophy_of_digital_technology.pdf?sequence=1&isAllowed=y

7. Loiko, A. I. Philosophy of mind [Electronic Resource]: textbook for general educational discipline "Philosophy and Methodology of Science" for students, listeners mastering the content of the educational program of higher education of the II stage, for all specialties full-time and part-time forms of education / A. I. Loiko; Belarusian National Technical University, Department of «Philosophical Teachings». – Minsk: BNTU, 2022. – Деп. в БНТУ 17.01.2022, № DEPBNTU-2022-47.

https://rep.bntu.by/bitstream/handle/data/109343/Philosophy_of_mind.pdf?sequence=1&isAllowed=y

Diagnosis tools of educational activity results

The estimation of student's knowledge level is made using a ten-point scale in accordance with the criteria approved by the Ministry of Education of the Republic of Belarus.

To estimate of student's achievements, it is recommended to use the following diagnosis tools:

- oral and written survey during practical classes;
- carrying out current work on specific topics
- student's presentation at a conference on a prepared abstract
- passing the exam.

Topics of abstracts

1. Philosophy and science.
2. Philosophy and ideology of the Belarusian state.
3. Philosophy and psychology: methodology of professional activity.
4. Plato's philosophy.
5. Philosophy of Aristotle.
6. Maieutics of Socrates.
7. Ethics in the structure of philosophy: ethics of software engineering.
8. Aesthetics in the structure of philosophy: design and construction activities.
9. Industry 4.0 and the Republic of Belarus.
10. Philosophy of culture and digital technologies.
11. Philosophy of convolution of nature and society.
12. Philosophy of ecosystems.
13. Philosophy of innovation.
14. Philosophy of law and cyber security.
15. Thinking and language: cognitive technologies.
16. Logic in the structure of philosophy: information technology.
17. Philosophy of sustainable development of society: goals of sustainable development of the Republic of Belarus.

18. Philosophy of continuity: historical memory and national unity.

19. Dialectics and synergetics: development of Belarusian society.

Final questions and tasks list for master student's individual work

1. Subject of philosophy.

2. Philosophy and worldview.

3. Philosophy of the Ancient East.

4. Philosophical traditions of India.

5. Philosophical traditions of China.

6. Ancient philosophy.

7. Philosophy of the Middle Ages.

8. Philosophy of the Renaissance.

9. Philosophy of the New Age: empiricism, rationalism, sensationalism.

10. German classical philosophy: Kant, Hegel, Feuerbach.

11. Philosophy of Marxism: dialectical-materialist understanding of nature and history.

12. Non-classical philosophy and its main directions.

13. Analytical philosophy.

14. Philosophical thought of Belarus.

15. Ontology and philosophy of nature.

16. Philosophy of space and time.

17. Dialectics and synergetics.

18. Biosphere and noosphere.

19. Philosophy of man.

20. Philosophy of consciousness.

21. Consciousness and artificial intelligence.

22. Social and individual consciousness.

23. Philosophy of society.

24. Economic philosophy.

25. Culture and civilization.

26. Ethics, aesthetics, philosophy of law.
27. Philosophy of history.
28. Prospects and risks of modern civilization
29. Belarus in the modern civilizational process.
30. Security philosophy.
31. Philosophy of technology.
32. Futurology and philosophy.
33. Kicking theory.
34. Theory of truth.
35. Philosophy of science.
36. Applied scientific research.
37. Basic scientific research.
38. Methodology of scientific research.
39. Science and innovation.
40. Philosophy in the professional activity of a specialist.

Methodological recommendations for organizing and performing individual work of students

During the study of the discipline, it is recommended to use the following forms of individual work:

- preparation of reports, thematic reports, presentations on given topics;
- compiling thematic selection of literature sources, internet- sources;
- work at topics (issues) are for self- study.

MINUTES OF ACADEMIC PROGRAMME AGREEMENT OF HIGHER EDUCATIONAL ESTABLISHMENT

Name of the academic discipline with which agreement is required	Department name	Proposals for changes in the content of the academic programme in academic discipline	The decision made by the department that designed the academic programme (indicating the date and number of the minutes of the department meeting)
Agreement is not required	Department of Philosophical Teachings	Agreement is not required	The content of this academic programme does not require agreement with other academic disciplines of the speciality. Minutes No. 9 dated 18.05. 2023