

MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

NATIONAL AVIATION UNIVERSITY

Faculty of Linguistics and Social Communications

Department of Philosophy



**METHOD GUIDE TO SELF-STUDY**

on

**«Philosophical Problems of Scientific Cognition»**

For all Fields of Study, Specialties and Educational and Professional programs

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## INTRODUCTION

The subject "Philosophical problems of scientific knowledge" is the theoretical and practical basis of a set of knowledge and skills that contribute to the formation of the scientific and worldview foundations of a master's degree student, enriching him with the methodological culture necessary for effective spiritual and practical activity, the ability to conduct scientific research work following the modern science requirements.

**The main target of studying the subject** is the formation of students' ability to perform the theoretical analysis of scientific knowledge in the sociocultural activities of people and the formation of practical skills for scientific knowledge application in various spheres of social life.

**The tasks of the discipline study** are:

- mastering the basic provisions of the discipline;
- acquaintance with the basic historical-scientific, historical-philosophical, and modern philosophical and scientific primary sources concerning the formation of science as a productive force of society;
- development of methodological culture;
- development of skills and abilities to distinguish the subject, object, methods, and techniques of scientific research;
- development of skills and abilities to apply philosophical methodology to research.

**Learning outcomes the subject makes it possible to achieve:**

- to find and substantiate new approaches to solving tasks and problems;
- to use the methodology and cognitive tools inherent in the chosen philosophical specialty;
- to critically comprehend, analyze and evaluate philosophical texts and apply relevant methods of their analysis and interpretation;
- to understand the connections of philosophy with other areas of scientific discourse, intellectual and humanitarian practices;
- to participate in scientific discussions on philosophy and interdisciplinary issues, discussions of philosophical issues with experts in other fields of knowledge (including aviation);
- to analyze, evaluate and forecast social, political, economic, and cultural processes using professional knowledge and specialized skills to solve complex problems of science;
- to develop and implement scientific and/or applied projects in the field of philosophy of scientific knowledge and related interdisciplinary issues;
- to make effective decisions on the management of complex professional and/or educational activities in the field of philosophy of science;
- to effectively carry out analytical substantiation, information, and organizational support of a professional activity, the aviation industry including.

**Competences the subject makes it possible to acquire:**

- the ability to solve problems of research and/or innovation in the field of philosophy of science or in the learning process, which involves research and/or innovation and is characterized by the uncertainty of conditions and requirements;
- the knowledge of the subject area and understanding of professional activity;
- the ability to identify, pose and solve problems;
- the ability to conduct research at the appropriate level;
- the ability to search, handle and analyze information from various sources;
- the ability to develop and manage projects;
- the ability to be critical and self-critical, which requires knowledge of their intellectual strengths and weaknesses, the ability to use the former and minimize the impact of the latter;
- the ability to adapt and act in a new situation, which involves the ability to apply effective strategies and tools to solve cognitive problems;

- the ability to work in a team, which involves the ability to overcome communicative tensions and conflict situations, to ensure the commitment of employees, to show appropriate flexibility, to distribute efforts with/among colleagues, to work for an overall result;
- the ability to use the historical and philosophical heritage of the philosophy of science in understanding and solving research problems;
- the ability to formulate and argue current ideas of the philosophy of science, to present evidence-based and substantiated research results;
- the possession of specialized knowledge within specific philosophical and scientific issues, systemic awareness of the relevant special (research) literature;
- the ability to choose and apply the most effective methodological research strategy;
- the ability to deal critically with texts and apply different methods of analysis and interpretation;
- the ability to critically evaluate the potential and boundaries of different scientific schools, which represent the main directions of development of philosophical theories of scientific communication;
- the ability to analyze, evaluate and forecast social, political, economic, and cultural processes using professional knowledge.

## Module 1. SCIENCE AS A PHENOMENON OF CIVILIZATION

### THEME 1.1.

#### INFORMATION SOCIETY AS THE KNOWLEDGE SOCIETY

##### Guidelines

1. Processing the theoretical material from *Philosophical Problems of Scientific Cognition. Manual* / M. Abysova, T. Shorina, T. Poda. Kyiv: NAU, 2023. P. 6–11.
2. Preparation for practical classes.
3. Performing self-study Tasks 1-3.
4. Literature processing.

##### Task 1. Fill in the table of Vocabulary of Theme 1.1.

<i>agrarian society</i>	
<i>industrial society</i>	
<i>information</i>	
<i>information society</i>	
<i>informatization</i>	
<i>knowledge</i>	
<i>knowledge society</i>	
<i>post-industrial society</i>	
<i>wave theory</i>	

##### Task 2. Review the material

1. Explain the content of the concepts "information society", "post-industrial society", and "knowledge society". Determine the defining criteria of each of the above theoretical models.
2. Name and characterize the information society's distinguishing features and reveal its contradictions.
3. Determine the role played by information, information technologies, and information resources in the modern "knowledge economy" structure.
4. Describe the content of the concepts "knowledge" and "information". Determine the conceptual differences between these concepts.
5. According to UNESCO's definition, what are the four pillars of knowledge societies must build on?

##### Task 3. Questions and tasks for self-control

1. What special features does science acquire in the information society?
2. What theories of the information society do you know?
3. Comment on F. Webster's conclusions about modern Western theories of the information society.
4. What are the conceptual differences between post-industrial and industrial societies?
5. What are the structural changes of modern society?

**List of literature:** [3], [6], [26], [43], [50].

### THEME 1.2.

#### THEORETICAL PROBLEMS OF SCIENCE

##### Guidelines

1. Processing the theoretical material from *Philosophical Problems of Scientific Cognition. Manual* / M. Abysova, T. Shorina, T. Poda. Kyiv: NAU, 2023. P. 11–17.
2. Preparation for practical classes.
3. Performing self-study Tasks 1-3.
4. Literature processing.

**Task 1. Fill in the table of Vocabulary of Theme 1.2.**

<i>science</i>	
<i>culture</i>	
<i>social activity</i>	
<i>social institution</i>	
<i>system of knowledge</i>	

**Task 2. Review the material**

1. Expand the content of "science" and "scientific knowledge" concepts. Define science as a social institution and describe its functioning in this status.
2. Name the backbone elements of science. Determine the features inherent in scientific knowledge.
3. Describe science as a field of public activity. Determine the object and subject of scientific activity, methods, and methods of science.
4. Expand the specifics of the philosophical understanding of the phenomenon of science
5. Describe science in the system of modern culture and reveal the socio-cultural orientation of science.

**Task 3. Questions and tasks for self-control**

1. Define scientific knowledge.
2. Show why science is a system of knowledge.
3. Describe science as a field of public activity.
4. Justify why science is a social institution.
5. What is the specificity of the philosophical understanding of science?
6. Expand the socio-cultural functions of science in modern society.

**List of literature:** [6], [8], [19], [22], [23], [33], [45], [47], [48].

THEME 1.3.

**WESTERN AND NATIVE TRADITIONS IN METHODOLOGY OF SCIENCE**

**Guidelines**

1. Processing the theoretical material from *Philosophical Problems of Scientific Cognition. Manual* / M. Abysova, T. Shorina, T. Poda. Kyiv: NAU, 2023. P. 17–25.
2. Preparation for practical classes.
3. Performing self-study Tasks 1-3.
4. Literature processing.

**Task 1. Fill in the table of Vocabulary of Theme 1.3.**

<i>empiricism</i>	
<i>methodology</i>	
<i>philosophy of science</i>	

<i>positivism</i>	
<i>post-positivism</i>	
<i>rationalism</i>	
<i>scientism</i>	
<i>synergetics</i>	
<i>theory of knowledge</i>	

### **Task 2. Review the material of the Theme**

1. Expand the content of "rationalism" and "empiricism" concepts and point out their theoretical and ideological effect on classical science development.
2. Describe the philosophical teachings and trends in the methodology of science: positivism, neopositivism, and empirio-criticism.
3. Describe the specifics of critical rationalism, historicism, and scientific realism, as well as the post-non-classical view of science.
4. Describe the features of the national tradition in the modern philosophy of science.

### **Task 3. Questions and tasks for self-control**

1. Define rationalism and empiricism.
2. How did the philosophical and worldview attitudes of "rationalism" and "empiricism" influence the formation of classical science?
3. Why did positivism eliminate philosophical metaphysics from the scientific knowledge system?
4. Did scientific cosmism influence the cultural and historical image of Russian science?

**List of literature:** [3], [6], [15], [22], [23], [26], [33], [40], [44], [47].

## THEME 1.4.

### **SPECIFICITY OF SCIENTIFIC KNOWLEDGE**

#### **Guidelines**

1. Processing the theoretical material from *Philosophical Problems of Scientific Cognition. Manual* / M. Abysova, T. Shorina, T. Poda. Kyiv: NAU, 2023. P. 26–31.
2. Preparation for practical classes.
3. Performing self-study Tasks 1-3.
4. Literature processing.

#### **Task 1. Fill in the table of Vocabulary of Theme 1.4.**

<i>mastering (developing)</i>	
<i>scientific knowledge</i>	
<i>subject</i>	
<i>object</i>	
<i>truth</i>	
<i>error</i>	
<i>lies</i>	

### **Task 2. Review the material of the Theme**

1. 1. Define the concepts of "knowledge" and "development".

2. Determine the main forms of world exploration and designate their formation and correlation specifics.
3. Justify how scientific knowledge differs from everyday knowledge. Name and reveal the main characteristics of scientific knowledge.
4. Describe the object of scientific knowledge. Explain what the ideality of the object of scientific knowledge means.
5. Expand the main features of the subject of scientific knowledge.
6. Describe the truth and error in science. Define absolute and relative truth.

### **Task 3. Questions and tasks for self-control**

1. What are the most essential signs of knowledge and development?
2. It is known that the main forms of mastering the world are: spiritually-theoretical, spiritually-practical, and subject-practical. As a result of what types of relations between the objective, subjective, and objective-subjective worlds these forms of mastering the world are formed?
3. Does every educated person act as a subject of scientific knowledge? Justify your answer.
4. Describe the relationship between absolute and relative truth. Do you agree with the thesis that truth is always concrete? What is a fallacy in science?

**List of literature:** [3], [6], [15], [22], [23], [26], [33], [40], [44], [47].

## THEME 1.5. UNITY OF EMPIRICAL AND THEORETICAL KNOWLEDGE IN SCIENTIFIC COGNITION

### **Guidelines**

1. Processing the theoretical material from *Philosophical Problems of Scientific Cognition. Manual* / M. Abysova, T. Shorina, T. Poda. Kyiv: NAU, 2023. P. 32–36.
2. Preparation for practical classes.
3. Performing self-study Tasks 1-3.
4. Literature processing.

### **Task 1. Fill in the table of Vocabulary of Theme 1.5.**

<i>empirical knowledge</i>	
<i>innovation</i>	
<i>intuition</i>	
<i>scientific knowledge</i>	
<i>theoretical knowledge</i>	
<i>tradition</i>	
<i>truth</i>	

### **Task 2. Review the material of the Theme**

1. Expand the content of the concepts "empirical level of scientific knowledge" and "theoretical level of scientific knowledge". Determine how these levels are related.
2. Describe the structure of empirical and theoretical knowledge.
3. Expand the role of tradition and innovation in the empirical and theoretical research process.
4. Designate the role of intuition and creativity in scientific knowledge.

### Task 3. Questions and tasks for self-control

1. How are the empirical and theoretical levels of scientific knowledge related?
2. What is the role of the tradition of science in the innovation process?
3. Determine the role of intuition in scientific knowledge.
4. Describe scientific creativity.
5. How do intuition and creativity correlate in scientific knowledge?

**List of literature:** [1], [4], [10], [21], [23], [42], [43], [48].

#### THEME 1.6.

### NON-LINEAR MUTUAL INFLUENCE OF PHILOSOPHICAL AND SCIENTIFIC COGNITION IN THEIR HISTORICAL PROGRESS

#### Guidelines

1. Processing the theoretical material from *Philosophical Problems of Scientific Cognition. Manual* / M. Abysova, T. Shorina, T. Poda. Kyiv: NAU, 2023. P. 38–44.
2. Preparation for practical classes.
3. Performing self-study Tasks 1-3.
4. Literature processing.

#### Task 1. Fill in the table of Vocabulary of Theme 1.6.

<i>natural philosophy</i>	
<i>noosphere</i>	
<i>Philosophy of cosmism</i>	

#### Task 2. Review the material of the Theme

1. Describe ancient natural philosophy as a prototype of the mutual influence of philosophical and specifically scientific knowledge.
2. Expand the connection between philosophy and science in the Modern age.
3. Outline the mutual influence of philosophical and scientific knowledge in the philosophy of cosmism.

#### Task 3. Questions and tasks for self-control

1. Describe the mutual influence of science and philosophy in the Greek Antiquity.
2. As a result of what processes does the biosphere grow into the noosphere?
3. How were philosophy and science interrelated in the Modern age?
4. How are the philosophy of cosmism and modern post-non-classical science connected?
5. Describe the view of the Cosmos in the philosophically-cultural direction of cosmism.

**List of literature:** [3], [6], [19], [20], [25], [32], [44].

#### THEME 1.7.

### INTERDEPENDENCE OF PHILOSOPHICAL AND SCIENTIFIC KNOWLEDGE IN POST-MODERN EPOCH

#### Guidelines

1. Processing the theoretical material from *Philosophical Problems of Scientific Cognition. Manual* / M. Abysova, T. Shorina, T. Poda. Kyiv: NAU, 2023. P. 46–51.

2. Preparation for practical classes.
3. Performing self-study Tasks 1-3.
4. Literature processing.

**Task 1. Fill in the table of Vocabulary of Theme 1.3.**

<i>Modern philosophy</i>	
<i>Modernity</i>	
<i>Postmodernity</i>	
<i>modernism</i>	
<i>postmodernism</i>	
<i>postnonclassical science</i>	
<i>relativism</i>	
<i>epistemic relativism</i>	

**Task 2. Review the material of the Theme**

1. Describe Modern and Postmodern in the civilizational movement of the Western world.
2. Expand the specifics of modernism and postmodernism in the philosophy and science of the XX century.
3. Identify postmodern ideas in philosophy and science in the late XX - early XXI centuries.

**Task 3. Questions and tasks for self-control**

1. What, in your opinion, are the key differences between the cultural eras of Modern and Postmodern?
2. Name the main features of post-non-classical science.
3. On what principles was science based in the cultural era of Modern?
4. How are postmodern ideas in philosophy and science related?
5. Describe the mutual influence of postmodern culture and post-non-classical science.

**List of literature:** [6], [8], [13], [21], [35], [38], [41], [43], [44].

THEME 1.8.

**PHILOSOPHICAL GROUNDS OF SCIENCE**

**Guidelines**

1. Processing the theoretical material from *Philosophical Problems of Scientific Cognition. Manual* / M. Abysova, T. Shorina, T. Poda. Kyiv: NAU, 2023. P. 52–57.
2. Preparation for practical classes.
3. Performing self-study Tasks 1-3.
4. Literature processing.

**Task 1. Fill in the table of Vocabulary of Theme 1.8.**

<i>axiology</i>	
<i>value</i>	
<i>epistemology</i>	
<i>ontology</i>	
<i>praxeology</i>	

### Task 2. Review the material of the Theme

1. Describe the ontological foundations of scientific knowledge and identify the problem of determining the object of scientific research.
2. Expand the epistemological foundations of scientific knowledge.
3. Describe the logical procedures of substantiation and proof in science.
4. Determine the praxeological and axiological foundations of scientific knowledge.

### Task 3. Questions and tasks for self-control

1. What is the reason for the difference between the ontological foundations of science for specific sciences and its cultural and historical stages?
2. Name the general initial epistemological foundations of scientific knowledge.
3. What are the logical foundations of science, and what are they based on?
4. What caused the interdependence of praxeological and axiological foundations of scientific knowledge

?List of literature: [1], [4], [6], [10], [20], [21], [23], [28], [31].

## Module 2. "Philosophical and Scientific Methodological Means"

### THEME 2.1.

### LOGICAL FOUNDATIONS OF SCIENTIFIC KNOWLEDGE.

#### Guidelines

1. Processing the theoretical material from *Philosophical Problems of Scientific Cognition. Manual* / M. Abysova, T. Shorina, T. Poda. Kyiv: NAU, 2023. P. 59–64.
2. Preparation for practical classes.
3. Performing self-study Tasks 1-3.
4. Literature processing.

#### Task 1. Fill in the table of Vocabulary of Theme 2.1.

<i>classical rationality</i>	
<i>nonclassical rationality</i>	
<i>postnonclassical rationality</i>	
<i>rationality</i>	
<i>rational and reasonable rationality</i>	
<i>scientific rationality</i>	
<i>logical reasoning</i>	
<i>traditional logic</i>	
<i>classical logic</i>	
<i>nonclassical logics</i>	

#### Task 2. Review the material of the Theme

1. Describe logic as the basis of rationality and define the concepts and types of rationality.
2. Expand the content of the concepts of "rationality", and "scientific rationality" and characterize the historical types of the latter.
3. Describe the change in scientific rationality in the context of the historical interaction between philosophy and science

### Task 3. Questions and tasks for self-control

1. What features are inherent in reasonable rationality?
2. What ideals are characteristic of each type of scientific rationality?
3. Designate features of reasonable rationality.
4. What types of rationality are distinguished in philosophical methodology?
5. What is the difference between rationalism and rationality?

**List of literature:** [6], [10], [21], [24], [29], [30], [42], [49].

## THEME 2.2.

### SPECIFICITY OF SCIENTIFIC LANGUAGE

#### Guidelines

1. Processing the theoretical material from *Philosophical Problems of Scientific Cognition. Manual* / M. Abysova, T. Shorina, T. Poda. Kyiv: NAU, 2023. P. 65–69.
2. Preparation for practical classes.
3. Performing self-study Tasks 1-3.
4. Literature processing.

#### Task 1. Fill in the table of Vocabulary of Theme 2.2.

<i>word</i>	
<i>term</i>	
<i>concept</i>	
<i>speech</i>	
<i>language</i>	
<i>natural language</i>	
<i>artificial language</i>	
<i>scientific language</i>	
<i>everyday language</i>	

#### 2. Review the material of the Theme

1. Describe everyday speech as a source of the formation of the language of science.
2. Expand the relationship between natural and artificial language in the development of science.
3. Describe the phenomenon of "migration" of scientific concepts and terms in the science functioning process.
4. Expand the transformation of the language of science under the influence of the application of information and communication technologies.

### Task 3. Questions and tasks for self-control

1. What logical procedures underlie the formation of scientific concepts?
2. Why is it impossible to identify the concepts and terms of science?
3. What is the intersubjectivity of scientific concepts and terms?
4. Explain how the computerization of science affects the formation of terms and concepts.

**List of literature:** [6], [7], [15], [21], [18], [42], [48].

## THEME 2.3.

### PHILOSOPHICAL METHODOLOGY AS BASICS OF SCIENTIFIC COGNITION

#### Guidelines

1. Processing the theoretical material from *Philosophical Problems of Scientific Cognition. Manual* / M. Abysova, T. Shorina, T. Poda. Kyiv: NAU, 2023. P. 71–74.
2. Preparation for practical classes.
3. Performing self-study Tasks 1-3.
4. Literature processing.

#### **Task 1. Fill in the table of Vocabulary of Theme 2.3.**

*method*

*methodology*

*philosophical methodology*

*scientific methodology*

#### **Task 2. Review the material of the Theme**

1. Expand the relationship between philosophical and scientific methodology.
2. Describe the methodological foundations of the empirical and theoretical levels of organization of scientific knowledge.
3. Expand the concept of method in philosophy.
4. Describe the method and methodology in the structure of the philosophy of science.

#### **Task 3. Questions and tasks for self-control**

1. Outline the relationship between philosophical and scientific methodology.
2. Determine the methodological foundations of theoretical knowledge.
3. How is the concept of method revealed in philosophy?
4. What is a methodology?
5. Determine the methodological foundations of empirical knowledge.

**List of literature:** [2], [3], [5], [20],[23], [24], [27], [40], [52].

## THEME 2.4.

### CORRESPONDENCE OF PHILOSOPHICAL AND SCIENTIFIC METHODOLOGY

#### Guidelines

1. Processing the theoretical material from *Philosophical Problems of Scientific Cognition. Manual* / M. Abysova, T. Shorina, T. Poda. Kyiv: NAU, 2023. P. 77–81.
2. Preparation for practical classes.
3. Performing self-study Tasks 1-3.
4. Literature processing.

#### **Task 1. Fill in the table of Vocabulary of Theme 1.3.**

<i>philosophical level of methodology</i>	
<i>general scientific level of methodology</i>	
<i>specific scientific level of methodology</i>	
<i>methodological approach</i>	
<i>methodological principle</i>	
<i>methodological tool</i>	

## 2. Review the material of the Theme

1. Expand the levels of methodology: philosophical, general scientific, and specific scientific.
2. Name and describe the criteria for the classification of scientific methods.
3. Expand the concepts of methodological approach, methodological principle, and methodological means of science.

### Task 3. Questions and tasks for self-control

1. What levels of methodology do you know?
2. Name the criteria for the classification of scientific methods.
3. What are the differences between the scientific approach and the scientific method?
4. What role does the methodological principle play in the scientific knowledge system?

**List of literature:** [2], [3], [5], [6], [13], [19], [24], [26], [45], [52].

## THEME 2.5.

### PECULIARITIES OF METHODOLOGY OF HUMANITIES, NATURAL, SOCIAL, AND TECHNICAL SCIENCES

#### Guidelines

1. Processing the theoretical material from *Philosophical Problems of Scientific Cognition. Manual* / M. Abysova, T. Shorina, T. Poda. Kyiv: NAU, 2023. P. 84–86.
2. Preparation for practical classes.
3. Performing self-study Tasks 1-3.
4. Literature processing.

#### Task 1. Fill in the table of Vocabulary of Theme 1.3.

<i>hermeneutics</i>	
<i>methodology of scientific research</i>	
<i>scientific method</i>	

## 2. Review the material of the Theme

1. Reveal the dependence of the choice of research methodology on the object.
2. Describe the specifics of the relationship between historical and logical in the natural, technical, social, and human sciences.
3. Determine the application of hermeneutic procedures in the natural, technical, and social sciences.

### Task 3. Questions and tasks for self-control

1. How does the object of study influence the choice of methodology?
2. Why is history logical, but logic is characterized by historicity?
3. Determine the role of the hermeneutic procedure in scientific research.
4. What is the specificity of hermeneutic procedures application in the natural, technical, social, and human sciences?

**List of literature:** [2], [6], [7], [13], [17], [21], [22], [24], [40], [45].

## THEME 2.6.

### PHILOSOPHICAL-METHODOLOGICAL PROBLEMS OF TECHNICAL SCIENCES

#### Guidelines

1. Processing the theoretical material from *Philosophical Problems of Scientific Cognition. Manual* / M. Abysova, T. Shorina, T. Poda. Kyiv: NAU, 2023. P. 88–92.
2. Preparation for practical classes.
3. Performing self-study Tasks 1-3.
4. Literature processing.

#### Task 1. Fill in the table of Vocabulary of Theme 2.6.

<i>human-machine system</i>	
<i>information modeling</i>	
<i>computer interpretation</i>	
<i>technics</i>	
<i>technical sciences</i>	

#### Task 2. Review the material of the Theme

1. Reveal the dependence of the choice of research methodology on the object.
2. Determine the essence of information modeling in modern science.
3. Expand the specifics of modeling complex non-linear actions in the natural, technical, social, and human sciences.

#### Task 3. Questions and tasks for self-control

1. Describe information modeling in science.
2. What is machine experience?
3. What role do human-machine systems play in interdisciplinary scientific formation?
4. What is a mental experience?

**List of literature:** [16], [17], [19], [21], [34], [36], [37], [39], [45], [46].

## THEME 2.7.

### CLASSIFICATION OF SCIENTIFIC KNOWLEDGE

#### Guidelines

1. Processing the theoretical material from *Philosophical Problems of Scientific Cognition. Manual* / M. Abysova, T. Shorina, T. Poda. Kyiv: NAU, 2023. P. 94–100.
2. Preparation for practical classes.
3. Performing self-study Tasks 1-3.
4. Literature processing.

#### Task 1. Fill in the table of Vocabulary of Theme 2.7.

<i>applied sciences</i>	
<i>fundamental sciences</i>	
<i>humanities</i>	
<i>natural sciences</i>	
<i>sciences classification</i>	
<i>social sciences</i>	
<i>technical sciences</i>	

## 2. Review the material of the Theme

1. Describe the concept and essence of classification in science. Expand the basic principles of the classification of sciences.
2. Determine the historical periodization of science: classics - non-classics - post-non-classics.
3. Describe interdisciplinary sciences in the structure of modern scientific knowledge.

### Task 3. Questions and tasks for self-control

1. Determine the basic principles for the classification of sciences.
2. Expand the ontological foundations of classical science.
3. What is the reason for the diversification of modern science?
4. Expand the epistemological foundations of post-non-classical science.
5. Give the methodological foundations of non-classical science.
6. What processes in the structure of scientific knowledge are associated with the diversification of modern science?

**List of literature:** [2], [3], [5], [13], [29], [30].

## THEME 2.8.

### SCIENTIFIC COMMUNITY. ETHICS OF THE SCIENTIST

#### Guidelines

1. Processing the theoretical material from *Philosophical Problems of Scientific Cognition. Manual* / M. Abysova, T. Shorina, T. Poda. Kyiv: NAU, 2023. P. 102–105.
2. Preparation for practicals.
3. Performing self-study Tasks 1-3.
4. Literature processing.

#### Task 1. Fill in the table of Vocabulary of Theme 1.3.

<i>ethics</i>	
<i>ethos of science</i>	
<i>scientific community</i>	
<i>scientific communication</i>	

## 2. Review the material of the Theme

1. Reveal the problems of the formation of the scientific community. Define the ethos of science.
2. Describe the concept and essence of the moral responsibility of a scientist.
3. Determine the features of scientific communication through social networks and digital platforms.

### Task 3. Questions and tasks for self-control

1. Designate the ethos of science.
2. Does scientific knowledge have a moral dimension?
3. What is the essence of the moral responsibility of a scientist?
4. Outline the features of scientific Internet communication.

**List of literature:** [14], [16], [18], [46], [51], [52].

## RECOMMENDED LITERATURE

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