$(\Phi 03.02 - 110)$ 

#### MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE NATIONAL AVIATION UNIVERSITY

Faculty of Linguistics and Social Communications Department of Philosophy

AGREED

Dean of the Faculty of Linguistics and Social Communication APPROVED Vice-Rector for Academics

\_\_\_\_\_Nataliia LADOHUBETS «\_\_\_\_»\_\_\_\_\_2023



## Quality Management System

### COURSE TRAINING PROGRAM on "Philosophical Problems of Scientific Cognition"

For Educational and Professional Programs of Second (Master) Level of Higher Education of All Specialties

Form of study	Sem.	Total (hours / ECTS Credits )	Lectures	Practicals	Self- study	HW / CGP / C	Tests	Form of Semester Control
Full- time	2	105/3,5	_	36	69		-	Graded test - 2 s.

#### Index: ECM-Nf-Nsp/21, ECM-Nf-Nsp/22, ECM-Nf-Nsp/23

#### QMS NAU CTP 12.01.10-01-2023

WINDHARS MA	Quality Management System	Document Code	QMS NAU CTP 8-12.01.10-01-2023
Manufacture and a second se	on "Philosophical Problems of Scientific Cognition"		p. 2 out of 21

Course Training Program on «Philosophical Problems of Scientific Cognition» is developed on the basis of the National Qualifications Framework (Resolution of the Cabinet of Ministers of Ukraine No. 519 of June 25, 2020), Higher education standards of second (Master) level, the report of National Agency for Higher Education Quality Assurance (Ukraine) dated November 27, 2019 regarding the humanitarian component of the educational process, compliance with the language legislation and other laws of Ukraine, educational and professional programs of the second (Master) level of higher education at the National Aviation University, Curricula and Extended Curricula of fulltime and part-time education seekers training, and corresponding normative documents.

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<u>05</u> 2023.	
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Course Training Program on «Philosophical Problems of Scientific Cognition» is agreed by the guarantors of the Educational and Professional Programs of the second (Master) level of higher education, in particular, regarding the place, objectives, tasks and content of this educational discipline to achieve the goals and learning outcomes, as well as the acquisition of competencies these educational and professional programs make it possible to achieve, in the context of formation worldview and civic qualities of higher education students, their moral and ethical values and their general cultural training, formation of methodological foundations for their original thinking and conducting research, critical understanding of problems in the field and on the border of the fields of knowledge. The guarantors' Approval Form ( $\Phi 03.02 - 111$ ) is attached.

Vice Rector on International Collaboration and Education

\_\_\_\_\_ Iryna ZARUBINSKA «\_\_\_» \_\_\_\_\_2023

Document level – 3b The Planned term between revisions – 1 year **Registered copy** 



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#### **INTRODUCTION**

Course Training Program on «Philosophical Problems of Scientific Cognition» is developed on the basis of the «Methodical guidance for the subject course training program of the full-time and part-time modes of study», approved by the order  $N_{249/0\Lambda}$ , of 29.04.2021 and corresponding normative documents.

### **1. EXPLANATORY NOTES**

#### 1.1. Place, objectives, tasks of the subject

*The place of the academic discipline.* «Philosophical Problems of Scientific Cognition» is included in the list of the mandatory components of educational and professional programs of second (Master) level of higher education of all specialties.

The subject reveals the most general relationship between various scientific fields and acts as a conceptual, logical, and methodological basis for studying specific scientific disciplines. Particular attention is paid to understanding the problems of the modern information society, internal and external patterns of development of scientific knowledge, mechanisms for changing scientific paradigms, and praxeological and axiological value systems that researchers and scientists are guided by, elucidating the characteristics of cognitive and innovative activities.

The academic discipline «Philosophical Problems of Scientific Cognition» guarantees a general scientific integrity to specialized disciplines, the study of which is provided by every educational and professional program.

Main target to study the subject is to form systemic ideas about science as a system of knowledge, a field of activity, and a social institution, the formation of methodological consciousness, the assimilation of the mechanisms of innovative solutions in modern science, as well as the production of practical skills for applying scientific knowledge in research activities provided by each educational and professional program.

The tasks of the discipline study are:

- mastering the basic provisions of the discipline;

- development of methodological culture;

- development of skills and abilities to analyze scientific texts;

- development of skills and abilities to discuss current scientific problems, to distinguish the subject, object, methods and techniques of scientific research;

- development of skills and abilities to apply philosophical methodology to research;

– development of skills and abilities to highlight the stages of scientific research and determine the innovative component of its results.

Course Training Program is approved by the guarantors of educational and professional programs of second (Master) level of higher education, in particular, regarding the place, objectives, tasks, and content of the academic discipline «Philosophical Problems of Scientific Cognition» to achieve the objectives and program

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learning outcomes, as well as obtaining the competencies provided for by these educational and professional programs, in the context of the formation of the worldview and civic qualities of students of higher education, their moral values and general cultural training, the formation of their methodological foundations for original thinking and research, critical reflection on problems in the industry and the verge of branches of knowledge.

# **1.2.** Learning outcomes and competences the subject makes it possible to achieve:

The academic discipline, together with other educational components of each educational and professional program where it is taught, allows achieving program learning outcomes determined by the educational and professional program, foremost, correlated with the achievement of general competencies – universal competencies that do not depend on the subject area, but are important for a successful further professional and social activities of the applicants for higher education in various spheres and their personal development.

Such general competencies, directly or indirectly related to the general competencies provided for by each educational and professional program, include, in particular, the most relevant general competencies for each specialty from the European Union (European Commission) Project "Tuning Educational Structures in Europe", indicated, in particular, in the order of the Ministry of Education and Science of Ukraine dated June 1, 2017 No. 600 (as amended in the Ministry of Education and Science of Ukraine order dated April 30, 2020 No. 584):

- ability for abstract and analytical thinking, and synthesis of ideas;
- capacity to learn and stay up-to-date with learning;
- ability to be critical and self-critical;
- ability to search for, process and analyse information from a variety of sources;
- ability to identify, pose and resolve problems;
- ability to plan and manage time;
- ability to adapt to and act in new situations;
- capacity to generate new ideas (creativity);
- ability to make reasoned decisions;
- ability to work in a team, to achieve consensus, and make joint decisions;
- ability for interpersonal relationships;
- ability to motivate people and move toward common goals;

- ability to communicate with representatives of different professional groups across varying social levels (with experts from other fields of knowledge/types of economic activity);

- appreciation of diversity and multiculturality;
- ability to work in an international context;
- ability to work autonomously;

- ability to design and manage projects, in particular in the domain of interdisciplinary scholarship;

- ability to take the initiative and to foster the spirit of entrepreneurship;

- ability to act on the basis of ethical reasoning;
- ability to determine and persist in mastery-approach goals and assigned duties;
- ability to act with social responsibility and civic awareness;
- ability to show awareness of equal opportunities and gender issues;
- ability to apply knowledge in practical situations;

-being able to draw the latest innovative technologies (nanotechnology, biotechnology, information technology, and cognitive science (NBIC)) in particular practical activities;

– ability to undertake research at an appropriate level;

- ability to coordinate philosophical, general scientific and specifically scientific methodological tools to solve problems and tasks.

According to some educational and professional programs, the academic discipline, together with other educational components, allows for achieving special (professional, subject matter) competencies determined by these educational and professional programs, depending on the specialty, knowledge, and specifics of each such educational and professional program.

## **1.3. Interdisciplinary Connections**

The academic discipline «Philosophical Problems of Scientific Cognition» supplements professional academic disciplines in the preparation of applicants for the master's educational level as a theoretical and methodological basis for conducting their scientific research, equips them with methods, approaches, and means of scientific activity, promotes the development of scientific and technical creativity. Knowledge and skills obtained in the studying process of this academic discipline are used in the future in professional activities and research.

## 2. COURSE TRAINING PROGRAM ON THE SUBJECT

## 2.1. The subject content

Training material is structured according to the module principle and consists of **two educational modules:** 

Module № 1 "Science as a Phenomenon of Civilization",

Module Nº 2 "Philosophical and Scientific Methodological Means",



that are logically complete, relatively independent, holistic parts of the subject, which mastering involves conducting a modular test and analysis of the results of its implementation.

#### 2.2. Modular structuring and integrated requirements for each module

## Module № 1 "Science as a Phenomenon of Civilization" Integrated requirements to the module №1:

-to know the basic philosophical and methodological concepts of modern science;

-to know the specifics and basic characteristics of the philosophical foundations of science;

-to be able to conduct comprehensive research based on a systematic scientific worldview using knowledge in the field of history and philosophy of science.

## Topic 1. Information Society as a Knowledge Society

Theories of the information society (D. Bell, E. Toffler, F. Fukuyama, M. Castells, F. Webster). Criteria for determining the information society. Technological criterion. The role of information in the information society. Service industries sphere. The correspondence of services and production. Paradoxes of the information society.

#### Topic 2. Theoretical Problems of Science

Science as a system of knowledge, sphere of activity and social institution. Specifics of philosophical understanding of the phenomenon of science. The place of science in the system of culture. Definition of scientific thought by V. Vernadskyi. Knowledge as the basis of purposeful activity. Evolution of ideas about scientific knowledge. The emergence of new knowledge as a sociocultural and philosophical problem.

#### Topic 3. Western and Native Traditions in Methodology of Science

New European rationalism and empiricism (R. Descartes and F. Bacon). Modern Western concepts of science methodology. Philosophy of science of the analytical school. K. Popper's critical rationalism. "Historical School" in modern Western philosophy of science (A. Koire, T. Kuhn, I. Lakatos, P. Feyerabend). Domestic methodology of science (V. Vernadskyi, B. Kedrov, O. Kedrovskyi, S. Krymskyi, V. Stepin, and others).

#### Topic 4. Specificity of Scientific Knowledge

The concept of "knowledge" and "mastering" the world, their relationship. The main forms of world mastering: spiritual-theoretical, spiritual-practical and object-practical. Features of scientific knowledge. Subject and object of scientific knowledge. The concept of an ideal object in science. The problem of truth in philosophy and science. Truth and lies.

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# Topic 5. Unity of Empirical and Theoretical Knowledge in Scientific Cognition

Sensuous and rational in cognition. The concept and essence of empirical and theoretical levels of scientific knowledge. Structure of empirical and theoretical knowledge. The specifics of empirical knowledge in modern science. Traditions and innovations in the process of empirical and theoretical research. The role of intuition and creativity in scientific knowledge.

# Topic 6. Non-Linear Mutual Influence of Philosophical and Scientific Cognition in their Historical Progress

Modification of the concepts of philosophy and science in the process of interaction: historical and philosophical aspect. Ancient natural philosophy as a prototype of the interaction of philosophical and concrete scientific knowledge. The connection between philosophy and science in modern times (R. Descartes, Fr. Bacon, T. Hobbes, I. Newton, B. Spinoza). Classical German philosophy on the specifics of the interaction of science and philosophy (I. Kant, G. Hegel, F. Schelling). Philosophy of cosmism on the interaction of philosophical and scientific knowledge: M. Umov, K. Tsiolkovskyi, O. Chizhevskyi, V. Vernadskyi and others. The anthropic principle.

# Topic 7. Interdependence of Philosophical and Scientific Knowledge in Postmodern Epoch

Modernity and postmodernity in the civilizational development of the Western world. Modernism and postmodernism in the philosophy and science of the XX century (A. Bergson, J. Habermas, G. Hacken, I. Prigogine, etc.). Postmodern ideas in philosophy and science at the end of the XX – at the beginning of the XXI centuries (J.-F. Lyotard, P. Kozlowski, M. Foucault, others).

#### Topic 8. Philosophical Grounds of Science

Ontological grounds of scientific knowledge. Philosophical understanding of the object of scientific knowledge. Epistemological grounds of scientific knowledge: sensuous and rational, empirical and theoretical aspects of scientific research. The problem of truth of scientific knowledge. Logical principles of scientific research. Logical procedures of substantiation and proof in science. Methodological principles of scientific knowledge.

## Module № 2 "Philosophical and Scientific Methodological Tools" Integrated requirements to the module № 2:

#### Know:

-to know the logical principles of scientific knowledge and features of the language of science;

-to apply philosophical methodology as the basis of scientific knowledge;

-to use knowledge of the discipline in the process of philosophical understanding of specific communicative practices.

### Topic 1. Logical Foundations of Scientific Knowledge

The concept of logical principles of science. Logic as the basis of rationality. Concepts and types of rationality. Scientific rationality and its historical types. Changing the type of scientific rationality in the context of the historical interaction of philosophy and science: classical, nonclassical and postnonclassical scientific rationality.

### Topic 2. Specificity of Scientific Language

The problem of formation of scientific concepts and terms. Everyday language as a source of formation of the language of science. The ratio of natural and artificial languages in the development of science. The phenomenon of "migration" of scientific concepts and terms in the process of functioning of science. Transformation of the language of science under the influence of the use of information and communication technologies.

## Topic 3. Philosophical Methodology as Basics of Scientific Cognition

The concept of methodology in philosophy. Empirical and theoretical levels of organization of scientific knowledge. The structure of the empirical level of organization of scientific knowledge. The structure of the theoretical level of organization of scientific knowledge. The concept of method in philosophy. The ratio of method and methodology in the structure of philosophical knowledge. Methodological principles of scientific knowledge.

#### Topic 4. Correspondence of Philosophical and Scientific Methodology

Features of scientific methodology. Levels of methodology: philosophical, general scientific and specific scientific. The concept of the method of cognition in science. Criteria for classification of scientific methods. Empirical and theoretical methods of scientific knowledge. General scientific and specific scientific methods of cognition. Quantitative and qualitative methods of scientific research. Fundamental and applied methods of scientific knowledge. The concept of methodological approach, methodological principle and methodological tool in science.



# Topic 5. Peculiarities of Methodology of Natural, Social, Humanities, and Technical Sciences

Explanation and understanding in the process of scientific research. Correlation of explanation and understanding as interpretive and hermeneutic procedures in natural and social sciences. The specifics of the relationship between the historical and the logical in the natural and social sciences. The role of the human-machine system in the natural, social humanities and technical sciences.

### Topic 6. Information and Communications Technologies in the Structure of Contemporary Scientific Knowledge

Model and modeling in modern science. Model as a basis of modeling method in cognitive activity. Features of formation of information models as bases of modern scientific research. The essence of information modeling in modern science. Modeling of complex nonlinear processes in scientific research. Mathematical experiment as a means of integrating scientific methods. Digital transformation of science.

### Topic 7. Classification of Scientific Knowledge

The concept and essence of classification in science. Basic principles of classification of sciences. Natural, social, humanities and technical sciences. Criteria for classifying sciences into empirical and theoretical. Fundamental and applied sciences. Historical periodization of science: classics, nonclassics, postnonclassics. Interdisciplinary sciences.

#### Topic 8. Scientific Community. Ethics for Scientists.

Problems of forming a scientific community. Ethos of science. Problems of public recognition of scientific activity of scientists. Value aspects of scientific activity of scientists. The concept and essence of the moral responsibility of the scientist. The role of modern science in solving global problems of today. Club of Rome and the problems of modern global modeling. Features of scientific communication through social networks and digital platforms.

## 2.3. Training schedule of the subject

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		Therese		To	tal, ho	our			
N⁰	Total Total (notices and the formation of the formation o								
1		2	3	4	5	6			
	Modu	le №1 ''Science as a Phenomenon of	Civiliza	tion	••	•			
		2 semester							
1.1	Information	Society as a Knowledge Society	6	-	2	4			
1.2	Theoretical	Problems of Science	6	-	2	4			
1.3	Western ar Science	nd Native Traditions in Methodology	of 6	-	2	4			
1.4	Specificity of	of Scientific Knowledge	6	-	2	4			
1.5	Unity of H Cognition	Empirical and Theoretical in Scientif	fic 6	-	2	4			
1.6	Non-Linear Scientific C	• Mutual Influence of Philosophical as ognition in their Historical Progress	nd 6	-	2	4			
1.7	Interdepend Knowledge	ence of Philosophical and Scientif in Postmodern Epoch	fic 6	-	2	4			
1.8	Philosophic	al Grounds of Science.	6	-	2	4			
1.9	Module Test	. №1	6 - 2 4						
		Total by the module №1	54		18	36			
	Madula Na	1 UDbilagankiaal and Sajantifia Matl		· a a l /	Taala	,,			
2.1		2 Philosophical and Scientific Med			2 1 0015	3			
$\frac{2.1}{2.2}$	Specificity	of Scientific Language	5	_	$\frac{2}{2}$	<u> </u>			
2.2	Philosophic Cognition	cal Methodology as Basics of Scientif	fic 6	_	2	4			
2.4	Corresponde	ence of Philosophical and Scientific	6		2	4			
2.5	Peculiarities Humanities,	s of Methodology of Natural, Social and Technical Sciences	al, 5	_	2	3			
2.6	Information Structure of	and Communications Technologies in the Contemporary Scientific Knowledge	ne 6	-	2	4			
2.7	Classificatio	on of Scientific Knowledge	5	-	2	3			
2.8	Scientific C	ommunity. Ethics for Scientists.	5	-	2	3			
2.9	Module Tes	t №2	7	_	2	5			
	Τ	otal by the module №2	51		18	33			
		Total by the subject	105	-	36	69			



#### **3. BASIC CONCEPTS OF GUIDANCE ON THE SUBJECT**

#### **3.1.** Teaching methods

It is recommended to use the following teaching methods during mastering the subject: - explanatory and illustrative method; - method of problem presentation; - reproductive method; - research method. The implementation of these methods are carried out during lectures, practical classes, self-study, analysis and solution of problems.

#### **3.2. List of references Basic literature**

3.2.1. Philosophical Problems of Scientific Cognition. Manual / M. Abysova, T. Shorina, T. Poda. Kyiv: NAU, 2023. 110 p.

3.2.2. Drotianko L., Shostak O., Abysova M., Chenbai N. Interdisciplinary Knowledge Problem in a High-Tech Society. Key Trends in Transportation Innovation (KTTI-2019). E3S Web Conf. 2020. Vol. 157. URL: https://doi.org/10.1051/e3sconf/202015704005.

3.2.3. Philosophy. Manual / M. Abysova, L. Kadnikova, T. Shorina. Kyiv: NAU, 2019. P. 101-116; 140-167; 203-211.

3.2.4. Rosenberg A., McIntyre L. The philosophy of science: a contemporary introduction. Routledge, 2019. 308 p.

3.2.5. Stanford encyclopedia of philosophy. URL: https://plato.stanford.edu/.

3.2.6. Why science needs philosophy. *Pnas.* 2019. Vol. 116, no. 10. P. 3948—3952. URL: https://doi.org/10.1073/pnas.1900357116.

#### **Additional Literature**

3.2.7. De Haro S. Science and philosophy: a love—hate relationship. *Foundations of science*. 2020. Vol. 25. P. 297—314. URL: https://doi.org/10.1007/s10699-019-09619-2.

3.2.8. McCain K., Kampourakis K. What is Scientific Knowledge?: An Introduction to Contemporary Epistemology of Science. Routledge, 2019. 314 p.

3.2.9. *Understanding Science*. URL: https://undsci.berkeley.edu/understanding-science-101/ (data zvernennia: 12.06.2023).

3.2.10. The race against time for smarter development; executive summary / ed. byS. Schneegans,J. Lewis,T. Straza.SC-2021/WS/7.URL: https://unesdoc.unesco.org/ark:/48223/pf0000377250 (date of access: 05.06.2023).

3.2.11. Johansson L.-G. Philosophy of science for scientists. Cham: Springer International Publishing, 2016. URL: https://doi.org/10.1007/978-3-319-26551-3 (data zvernennia: 14.06.2023).

3.2.12. Gabbay D. M., Thagard P., Woods J. General Philosophy of Science: focal issues : Handbook of the Philosophy of Science / ed. by T. A. Kuipers. ELSEVIER, 2007. 683 p. URL: https://bayanebartar.org/file-dl/library/Linguistic/General-Philosophy-of-Science-Focal-Issues.pdf.

#### **3.3. Internet Information resource**

3.3.2. Repository of NAU: https://er.nau.edu.ua/

3.3.2. STLibrary of NAU: https://www.lib.nau.edu.ua/

3.3.3. Website of Department of Philosophy: https://fls.nau.edu.ua/



Table 4-1

#### 4. RATING SYSTEM OF KNOWLEDGE AND SKILLS ASSESSMENT

4.1. Assessment of certain kinds of student academic work is carried out in accordance with table 4.1.

Kind of Academic Work	Maximum Grade Values	Kind of Academic Work	Maximum Grade Values							
2 semester										
Module № 1 «Science as a Phenomenon Module № 2 « Philosophical and Scientific										
of Civilizati	Means»									
Kind of academic work	Grade values	Kind of academic work	Grade values							
The answer for practical	16	The answer for practical	16							
classes (8 points x 2)		classes (8 points x 2)								
Carrying out practical	20	Carrying out for practical	20							
classes	(total)	classes	(total)							
For admission to complete module test №1, a student must receive not less than	22 points	For admission to complete module test №2, a student must receive not less than	22 points							
Carrying out Module Test №1	14	Carrying out Module Test №2	14							
Total by the Module №1	50	Total by the Module №2	50							
Total	by the Modules J	№1, №2	100							
	Total by the subject									

4.2. Completed types of educational activities are credited to the student if he/she receives a positive ratings for them (Appendix 1).

4.3. The ratings sum received by the students for certain types of completed academic activities constitute the **current module rating**.

4.4. The **module test rating assessment** consists of points based on the module test results and the current module assignments, which tasks are approved in the established order by the department.

4.5. The **final module rating assessment** is determined (in points and in the national scale) as the sum of the current and module test rating assessments.

4.6. In case of the graded test, the **final semester rating grade** is equal to the final semester module rating and is converted into a grade based on the national scale and the ECTS scale (Appendix 2).

4.7. The final semester rating grades, according to the national scale and the ECTS scale are entered in the credit and examination information, student's record book and individual studying plan, for example: 92/Ex./A, 87/Good/B, 79/Good/C, 68/Sat./D, 65/Sat./E etc.

4.8. The **final rating grade** for the subject is equal to the final semester grade. The specified final grade for the subject is entered in the Diploma Appendix.

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Appendix 1

## **Correspondence of rating in points to rating in the national scale**

Rating in points													
3	4	5	6	7	8	9	10	11	13	14	15	Rating in the national scale	
3	4	5	6	7	8	9	9-10	10-11	12-13	13-14	14-15	Excellent	
2,5	3	4	5	6	6-7	7-8	8	9	10-11	11-12	12-13	Good	
2	2,5	3	4	4-5	5	6	6-7	7-8	8-9	9-10	9-11	Satisfactory	

Rating in points												
16	17	18	19	20	21	22	23	24	25	26	27	national scale
15-16	16-17	17-18	17-19	18-20	19-21	20-22	21-23	22-24	23-25	24-26	25-27	Excellent
12-14	13-15	14-16	15-16	15-17	16-18	17-19	18-20	18-21	19-22	20-23	20-24	Good
10-11	10-12	11-13	12-14	12-14	13-15	13-16	14-17	15-17	15-18	16-19	16-19	Satisfactory

Rating in points												
28	28 29 30 31 32 33 34 35 36 37 38 39										national scale	
26-28	26-29	27-30	28-31	29-32	30-33	31-34	32-35	33-36	34 - 37	34-38	35-39	Excellent
21-25	22-25	23-26	23-27	24-28	25-29	26-30	27-31	27-32	28-33	29-33	29-34	Good
17-20	18-21	18-22	19-22	19-23	20-24	20-25	21-26	22-26	22-27	23-28	24-28	Satisfactory

Rating in points												
40	40 41 42 43 44 45 46 47 48 49 50 51										Rating in the national scale	
36-40	37-41	38-42	39-43	40-44	41-45	42-46	43-47	43-48	44-49	45-50	46-51	Excellent
30-35	31-36	32-37	32-38	33-39	34-40	35-41	35-42	36-42	37-43	38-44	38-45	Good
24-29	25-30	25-31	26-31	27-32	27-33	28-34	28-34	29-35	30-36	30-37	31-37	Satisfactory

Rating in points												Detters in the			
52	53	54	55	56	57	58	59	60	61	62	63	national scale			
47-52	48-53	49-54	50-55	51-56	51-57	52-58	53-59	54-60	55-61	56-62	57-63	Excellent			
39-46	40-47	41-48	41-49	42-50	43-50	44-51	44-52	45-53	46-54	47-55	47-56	Good			
31-38	32-39	32-40	33-40	34-41	34-42	35-43	36-43	36-44	37-45	37-46	38-46	Satisfactory			

Rating in points												Dethe she the
64	64     65     66     67     68     69     70     71     72     73     74     75     Rating nations									national scale		
58-64	59-65	60-66	60-67	61-68	62-69	63-70	64-71	65-72	66-73	67-74	68-75	Excellent
48-57	49-58	50-59	50-59	51-60	52-61	53-62	53-63	54-64	55-65	56-66	56-67	Good
38-47	39-48	40-49	40-49	41-50	41-51	42-52	43-52	43-53	44-54	44-55	45-55	Satisfactory

Rating in points												
76	77	78	79	80	81	82	83	84	85	86	87	national scale
68-76	69-77	70-78	71-79	72-80	73-81	74-82	75-83	76-84	77-85	77-86	78-87	Excellent
57-67	58-68	59-69	59-70	60-71	61-72	62-73	62-74	63-75	64-76	65-76	65-77	Good
46-56	46-57	47-58	47-58	48-59	49-60	49-61	50-61	50-62	51-63	52-64	52-64	Satisfactory



Appendix 2

# Correspondence of the final semester rating grade to the grade based on the national scale and the ECTS scale

Crada	Crada in		Grade in the ECTS scale
in points	national scale	Grade	Definition
			Excellent
90-100	Excellent	Α	(outstanding performance but with only minor
			errors)
			Very good
82-89		В	(above the average standard but with some
	Good		errors)
			Good
75-81		C	(generally sound work with a number of
			notable errors)
67-74		Л	Satisfactory
0/-/4	Satisfactory	D	(fair but with significant shortcomings)
60-66	Satisfactory	F	Sufficient
00-00		Ľ	(performance meets the minimum criteria)
			Fail
35-59	Fail	FX	(some more work required before the credit
			can be awarded)
1 3/		Г	Fail
1-34		Г	(considerable further work is required)

NUNOHARSING	Quality Management System	Document Code	QMS NAU CTP 8-12.01.10-01-2023
REMAILED THE	on "Philosophical Problems of Scientific Cognition"		p. 16 out of 21

 $(\Phi \ 03.02 - 01)$ 

#### АРКУШ ПОШИРЕННЯ ДОКУМЕНТА

№ прим.	Куди передано (підрозділ)	Дата видачі	П.І.Б. отримувача	Підпис отримувача	Примітки

(Φ 03.02 – 02)

	АРКУШ ОЗНАЙ	иомлення з д	цокументою	
N⁰		Підпис	Дата	Π
пор	Прізвище ім'я по-оатькові	ознаиомлен	ознаиом-	Примітки
nop.		ої особи	лення	

JALLO HARSHIE
ROR
PILAMENIA STATE

(Φ 03.02 – 04)

#### АРКУШ РЕЄСТРАЦІЇ РЕВІЗІЇ

№ пор.	Прізвище ім'я по-батькові	Дата ревізії	Підпис	Висновок щодо адекватності

## $(\Phi 03.02 - 03)$

#### АРКУШ ОБЛІКУ ЗМІН

№ зміни		№ листа	(сторінки)	Підпис	Дата	Лата	
	Зміненого	Заміненого	Нового	Анульо- ваного	особи, яка внесла зміну	внесення зміни	введення зміни

(Φ 03.02 – 32)

#### УЗГОДЖЕННЯ ЗМІН

	Підпис	Ініціали, прізвище	Посада	Дата
Розробник				
Узгоджено				



(F 03.02 – 111)

## The guarantors' Approval Form

№ пор.		Signature	Surname, first name of the guarantor	Educational and Professional Programs of the second (Master) level of higher education	Date
1	Approved				
2	Approved				
3	Approved				
4	Approved				
5	Approved				
6	Approved				
7	Approved				
8	Approved				
9	Approved				
10	Approved				
11	Approved				



#### Quality Management System Course Training Program on "Philosophical Problems of Scientific Cognition"

Document	QMS NAU
Code	CTP 8-12.01.10-01-2023

№ пор.		Signature	Surname, first name of the guarantor	Educational and Professional Programs of the second (Master) level of higher education	Date
12	Approved				
13	Approved				
14	Approved				
15	Approved				
16	Approved				
17	Approved				
18	Approved				
19	Approved				
20	Approved				
21	Approved				
22	Approved				
23	Approved				
24	Approved				



#### Quality Management System Course Training Program on "Philosophical Problems of Scientific Cognition"

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Code	CTP 8-12.01.10-01-2023

№ пор.		Signature	Surname, first name of the guarantor	Educational and Professional Programs of the second (Master) level of higher education	Date
25	Approved				
26	Approved				
27	Approved				
28	Approved				
29	Approved				
30	Approved				
31	Approved				
32	Approved				
33	Approved				
34	Approved				
35	Approved				
36	Approved				
37	Approved				



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Document	QMS NAU
Code	CTP 8-12.01.10-01-2023

№ пор.		Signature	Surname, first name of the guarantor	Educational and Professional Programs of the second (Master) level of higher education	Date
38	Approved				
39	Approved				
40	Approved				
41	Approved				
42	Approved				
43	Approved				
44	Approved				
45	Approved				
46	Approved				
47	Approved				
48	Approved				
49	Approved				
50	Approved				