

МІНІСТЕРСТВО ОСВІТИ І НАУКИ УКРАЇНИ
ХАРКІВСЬКИЙ НАЦІОНАЛЬНИЙ ЕКОНОМІЧНИЙ УНІВЕРСИТЕТ
ІМЕНІ СЕМЕНА КУЗНЕЦЯ



"ЗАТВЕРДЖУЮ"

Проректор з навчально-методичної роботи

Карина НЕМАШКАЛО

Методологія та організація наукових досліджень
робоча програма навчальної дисципліни

Галузі знань	01 «Освіта/Педагогіка»
Спеціальність	011 «Освітні, педагогічні науки»
Освітній рівень	третій (освітньо-науковий)
Освітня програма	Освітні, педагогічні науки

Статус дисципліни	обов'язкова
Мова викладання, навчання та оцінювання	англійська

Завідувач кафедри міжнародних економічних

відносин

Ірина ОТЕНКО

Харків
2022

MINISTRY OF EDUCATION AND SCIENCES OF UKRAINE
SIMON KUZNETS KHARKIV NATIONAL UNIVERSITY OF ECONOMICS



"APPROVED"

Vice-Rector on Educational and Methodical Work

Karina NEMASHKALO

Methodology and organizing of scientific research
Syllabus of the academic discipline

Field of knowledge	01 «Education/Pedagogy»
Specialty	011 «Educational, Pedagogical Sciences»
Educational level	third (educational and science level)
Educational program	Educational, Pedagogical Sciences

Type of discipline	basic
The language of teaching, learning, and rating	English

Head of Department
of the International Economic

Relations

Iryna OTENKO

**Kharkiv
2022**

APPROVED

at the meeting of the Department of international economic relations
Protocol № 1 dated 31.08.2022 p.

Compiled by:

Lebid O. V., Ph.D., professor of the international economic relations department.

List of renewal and re-approval of the syllabus of the academic discipline

Academic year	Date of the meeting of the department	Protocol number	Sign of the Head of the department

Abstract of the discipline

To conduct scientific research by a Ph.D. student is important as to take liability to finish chosen Ph.D. program. A huge informational flow is falling on researchers every day. Therefore, the possibility of coping with information, managing its sources, and creating the requested database is essential for successfully writing the Ph.D. thesis. The second part of the discipline "Methodology and Organizing of Scientific Researches" is devoted to the acknowledgment of Ukrainian legislation of the educational process and the process of defense and rewarding of Ph.D. students who completed the educational program.

The academic discipline "Methodology and Organizing of Scientific Researches" syllabus were compiled according to the educational program of Ph.D. students training in specialty 011 "Educational, Pedagogical Sciences".

The object of the academic discipline "Methodology and Organizing of Scientific Researches" is a process of scientific research.

The subject of the academic discipline is the system of methods, technics, and approaches of conducting scientific research.

The purpose of the academic discipline is the formation of future Ph.D. competencies to conduct scientific research independently, by yourself.

The main task of the academic discipline "Methodology and Organizing of Scientific Researches" consists in studying methods, technics, and approaches of conducting scientific research.

Characteristics of the discipline

Course	1
Semester	1
Number of credits ECTS	6
Final control type	Credit

Structural and logical scheme of studying the discipline

Prerequisites	Postrequisites
Microeconomics	Financial Management
Macroeconomics	International Markets Analysis
World economy and the international communications	
International information	
Financial analysis	

Competences and learning outcomes of the studying discipline

Competences	Learning outcomes
<p>3K1. Mastering general scientific competence aimed at forming a systematic scientific outlook in the subject area and professional activity</p> <p>3K2. Ability to think critically, generate new complex ideas, analyze and synthesize holistic knowledge</p> <p>CK1. Ability to search, process and analyze and generalize information for conducting independent scientific research in the educational sphere</p> <p>CK3. Acquisition of in-depth knowledge of pedagogy, in particular, understanding of theoretical and practical problems, history of development and current state of scientific knowledge, critical analysis of basic concepts, mastering of scientific terminology</p>	<p>PH1. To form a systematic scientific outlook, to possess modern theories and concepts in the field of education.</p>
<p>3K2. Ability to think critically, generate new complex ideas, analyze and synthesize holistic knowledge</p> <p>3K3. Ability to organize and conduct original scientific research using best practices in professional activity</p> <p>3K6. The ability to act on the basis of ethical considerations and academic integrity, to act socially responsibly and consciously</p> <p>CK1. Ability to search, process and analyze and generalize information for conducting independent scientific research in the educational sphere</p> <p>CK3. Acquisition of in-depth knowledge of pedagogy, in particular, understanding of theoretical and practical problems, history of development and current state of scientific knowledge, critical analysis of basic concepts, mastering of scientific terminology</p> <p>CK6. Ability to implement the results of one's own research on pedagogy</p> <p>CK7. Ability to analyze, generalize and apply international experience in the field of education</p> <p>CK8. The ability to determine the state and potential of the professional training organization system in educational institutions, in particular mastering the method of analyzing educational activity in an educational institution, conducting pedagogical diagnostics and monitoring the quality of education</p>	<p>PH2. To organize and conduct original scientific research in the field of education at the appropriate professional level, to achieve scientific results that create new knowledge for solving current problems of theory and practice.</p>
<p>3K2. Ability to think critically, generate new complex ideas, analyze and synthesize holistic knowledge</p> <p>3K3. Ability to organize and conduct original scientific research using best practices in professional activity</p> <p>3K6. The ability to act on the basis of ethical considerations and academic integrity, to act socially responsibly and consciously</p> <p>CK1. Ability to search, process and analyze and generalize information for conducting independent scientific research in the educational sphere</p> <p>CK4. Ability to apply innovative teaching methods and teaching methods of professional disciplines</p> <p>CK6. Ability to implement and publicize the results of one's own research on pedagogy</p> <p>CK9. The ability to manage educational, practically oriented projects in educational spheres</p>	<p>PH3. Demonstrate the skills of independent research, critical thinking, openness to new knowledge, evaluate the results of autonomous work and take responsibility for personal professional development and training of others.</p>
<p>3K1. Mastering general scientific competence aimed at forming a systematic scientific outlook in the subject area and professional activity</p> <p>3K2. Ability to think critically, generate new complex ideas, analyze and synthesize holistic knowledge</p> <p>CK1. Ability to search, process and analyze and generalize information for conducting independent scientific research in the educational sphere</p> <p>CK6. Ability to implement the results of one's own research on pedagogy</p> <p>CK7. Ability to analyze, generalize and apply international experience in the field of education</p> <p>CK10. Ability to teach, consultative support of students</p>	<p>PH7. Carry out a critical analysis, summarize the results of scientific research, formulate and justify conclusions and proposals regarding the development of conceptual and methodological knowledge in the field of education.</p>

Competences	Learning outcomes
<p>3K1. Mastering general scientific competence aimed at forming a systematic scientific outlook in the subject area and professional activity</p> <p>3K2. Ability to think critically, generate new complex ideas, analyze and synthesize holistic knowledge</p> <p>3K6. The ability to act on the basis of ethical considerations and academic integrity, to act socially responsibly and consciously</p> <p>CK2. The ability to ensure the quality of education, positive dynamics of educational achievements of subjects of educational activity</p> <p>CK4. Ability to apply innovative teaching methods and teaching methods of professional disciplines</p> <p>CK11. The ability to manage educational activities for the training of a specialist with the help of a developed system of didactic tools based on subject-subject interaction of participants in the educational process</p>	<p>PH10. To test and implement the results of one's own research in the field of education.</p>
<p>3K3. Ability to organize and conduct original scientific research using best practices in professional activity</p> <p>3K4. The ability to communicate with the scientific community for the purpose of presenting the results of scientific research and their publication in the state, English and/or another foreign language</p> <p>3K6. The ability to act on the basis of ethical considerations and academic integrity, to act socially responsibly and consciously</p> <p>3K8. Possession of communication skills, the ability to show empathy</p> <p>CK2. The ability to ensure the quality of education, positive dynamics of educational achievements of subjects of educational activity</p> <p>CK8. Possession of communication skills, the ability to show empathy</p>	<p>PH11. To act based on ethical considerations and academic integrity in the process of conducting scientific research, publicizing the results and their implementation.</p>
<p>3K1. Mastering general scientific competence aimed at forming a systematic scientific outlook in the subject area and professional activity</p> <p>3K2. Ability to think critically, generate new complex ideas, analyze and synthesize holistic knowledge</p> <p>3K3. Ability to organize and conduct original scientific research using best practices in professional activity</p> <p>3K5. Ability to personal and professional development</p> <p>CK1. Ability to search, process and analyze and generalize information for conducting independent scientific research in the educational sphere</p> <p>CK7. Ability to analyze, generalize and apply international experience in the field of education</p>	<p>PH12. Apply the skills to plan and manage the time of preparing a dissertation research, formulate the goal, tasks, object and subject of research, form a structure and develop a research plan, use research methods adequate to the processes and phenomena under investigation, create grounded and reliable new knowledge through original research, quality which meets the requirements of the modern development of scientific research at the international level</p>

The program of the discipline

Content module 1. Methodological foundations of scientific research

Topic 1. Science and scientific research.

- 1.1. What is science? Types of sciences.
- 1.2. Basic elements of science: fact, hypothesis, concept.
- 1.3. Types of concept. Concept's procedures.

Topic 2. Scientific method. Methodology of scientific research.

- 2.1. Stages of scientific research.
- 2.2. Thesis topic, goal, and objectives formulation.
- 2.3. Results and mistakes of scientific research.

Topic 3. Empirical research methods and Toolkit for data processing of empirical research.

- 3.1. The measurement and an experiment.
- 3.2. Experts' method.
- 3.3. Mathematical and statistical methods in scientific research.

Topic 4. Theoretical research methods.

- 4.1. Deduction and induction methods.
- 4.2. Analogy, idealization, abstraction, ranking.
- 4.3. Methods of causal relationships revealing.

Topic 5. The systematic method of research. Methodology of research of complex systems.

- 5.1. The systematic method.
- 5.2. The systematic approach and system analysis.
- 5.3. Complex systems research methods.

Content module 2. Technology and organization of scientific research

Topic 6. Models and modeling method in scientific research.

- 6.1. The concept of a model and its types.
- 6.2. Quality and estimation of a model.

Topic 7. Scientific activity and scientific research organizing.

- 7.1. Commercial scientific research.
- 7.2. Self-checking algorithm of a thesis.

Topic 8. Information provision of scientific research.

- 8.1. Technology of working with information source.
- 8.2. How to compile a bibliography.
- 8.3. Scientometric databases and systems, and Hirsch index.

Topic 9. The technology of work on the dissertation. Presentation, protection, and implementation of the result

- 9.1. A thesis structure.
- 9.2. Dissertation abstract and presentation of scientific research.
- 9.3. A thesis defense procedures.

The list of the practical classes as well as questions and tasks for independent work you can find in the "Rating plan of the discipline" table.

Teaching and learning methods

The set of teaching methods aimed at activating and stimulating the educational and cognitive activity of postgraduate students, which are used during the teaching of the academic discipline "Methodology and Organizing of Scientific Researches", include problem lectures, discussions, presentations of reports, the game in the triangle "speaker – opponent – reviewer", mini-training sessions, problem solving lecture.

When studying the first topic, students should create their own dictionary of researcher terms and discuss it in the audience. At the practical lesson on the second topic, a discussion is planned on the question "Is it possible to write Ph.D. thesis in one year". At the practical session on the third topic, students present reports on the stages of development of their own research. According to the results of the lecture on the fourth topic, students, based on the results of their individual work, propose a set of theoretical methods they supposed to use. In a practical lesson on the fifth topic, students present reports on the subject structure of the research and work according to the rules of the game in the triangle "speaker – opponent – reviewer". In the practical session on the sixth topic, students solve a problem of factor models building. According to the results of the lecture on the seventh topic, students analyze the self-checking algorithm of a thesis and present the results to the group. At the practical session on the eighth topic, students take part in the discussion on the question "Is it possible to write Ph.D. thesis without visiting a classical library?" When studying the nine topic, students should present their thesis structure.

Procedure for evaluating learning outcomes

An essential component of the educational process is the systematic, complex control and evaluating of the quality of competencies acquired by students according to the requirements of state education standards, as well as adaptation to the pan-European requirements defined by the European Credit System (hereinafter ECTS).

Evaluation of the results of studying by students of the academic discipline "Methodology and Organizing of Scientific Researches" is carried out according to the cumulative 100-point system. It contains current control during the semester in the form of written tests, student presentations during lectures, Practical and practical classes, is evaluated by the sum of the points scored (the maximum amount is 100 points; the minimum amount that allows the student to pass the exam is 60 points).

The current control includes evaluation of the student's work during classes:

Presentations of reports and individual tasks to be completed in the PowerPoint environment or another application designed for creating presentations. A student can get the maximum score of 10 points if there are at least 10 slides that fully reveal the content of the discussed issues. The total number of points is **30**.

The current control work, rated at a maximum of 10 points, contains test and calculation tasks, is performed in Personal Educational System (PES). The maximum score for each test is 10 points, a total of **20** points per semester.

Individual work:

Performance of individual scientific research results. The maximum score for scientific report is **40** points;

Creative task Maximum score is **10** points, which can be obtained on the condition of writing and publishing during the semester an article or conference abstracts. 8 points can be obtained if the student does not want to bring the creative task to the level of publication and simply places it in the PES.

The final grade for the academic discipline takes into account the points obtained during the current control of the cumulative system. The total result in points for the semester is:

"60 or more points - credited",

"59 or less points - not credited" and is entered in the credit "Performance record" of the academic discipline.

In case of obtaining less than 60 points, the Ph.D. student must conduct tasks that he/she have not yet done.

Rating plan of the discipline

Topic	Studying form		Types of control	Maximum score
Topic 1. Science and scientific research	<i>Classroom work</i>			
	Lecture	Topic 1. Science and scientific research	Express testing	
	Practical class	Familiarity with the structure of the discipline, determining the priorities of its study, discussing the features of the financial system. Solving puzzles, crosswords	Active participation	
		Work in small groups: create your own dictionary of scientific research and discuss it in the audience	Active participation	
	<i>Individual work</i>			
Preparation for classes	Study of lecture material, preparation for practice and Practical classes. Tasks solving. Performing an individual task 1	Homework check		
Topic 2. Scientific method. Methodology of scientific research	<i>Classroom work</i>			
	Lecture	Topic 2. Scientific method. Methodology of scientific research	Express testing	
	Practical classes	Discussion of features of essay writing, approval of essay topics for all members of the group, selection and proper design of the list of literature for essay and individual tasks writing	Active participation	
	<i>Individual work</i>			
Preparation for classes	Study of lecture material. Search for materials of the essay. Writing a justification for the topic of the essay. Search for sources of information for writing an essay (minimum 10 sources), forming a list of references for writing an essay	Homework check		
Topic 3. Empirical research methods and toolkit for data processing of empirical research	<i>Classroom work</i>			
	Lecture	Topic 3. I Empirical research methods and toolkit for data processing of empirical research	Express testing	
	Practical classes	Solving practical and situational tasks. Presentations of reports on the stages of development of the scientific research	Active participation	
		First individual task presentation	Presentation	10
	<i>Individual work</i>			
Preparation for classes	Study of lecture material, preparation for classes and tests. Tasks solving. Performing an individual task 2	Homework check		

Topic	Studying form		Types of control	Maximum score
Topic 4. Theoretical research methods	<i>Classroom work</i>			
	Lecture	Topic 4. Theoretical research methods	Active participation	
	Practical classes	First written test	Written test	10
		Based on the results of their individual work, students propose a set of theoretical methods they supposed to use.	Active participation	
	<i>Individual work</i>			
	Preparation for classes	Study of lecture material, preparation for classes. Tasks solving. Performing an individual task 2	Homework check	
Topic 5. Systematic method of research. Methodology of research of complex systems	<i>Classroom work</i>			
	Lecture	Topic 5. Systematic method of research. Methodology of research of complex systems	Express testing	
	Practical classes	Students present reports and work in the triangle "speaker – opponent – reviewer"	Active participation	
		Second individual task presentation	Presentation	10
	<i>Individual work</i>			
Preparation for classes	Formulation of the purpose and tasks of essay writing, definition of methods of the decision of problems	Homework check		
Topic 6. Models and modeling method in scientific research	<i>Classroom work</i>			
	Lecture	Topic 6. Models and modeling method in scientific research	Express testing	
	Practical classes	Students solve the problem of overcoming the obstacles of obtaining information and factor models building	Active participation	
	<i>Individual work</i>			
Preparation for classes	Study of lectures material, preparation for classes. Preparation of the presentation of the results of the individual task 3	Homework check		
Topic 7. Scientific activity and scientific research organizing	<i>Classroom work</i>			
	Lecture	Topic 7. Scientific activity and scientific research organizing	Express testing	
	Practical class	Second written test	Written test	10
		Third individual task presentation	Presentation	10
	<i>Individual work</i>			
Preparation for classes	Repetition of theoretical material, repetition of tasks solving methods	Homework check		

Topic	Studying form		Types of control	Maximum score
Topic 8. Information provision of scientific research	<i>Classroom work</i>			
	Lecture	Topic 8. Information provision of scientific research	Express testing	
	Practical class	Presentation of reports and essays, their discussion	Essay	10
	<i>Individual work</i>			
	Preparation for classes	Repetition of theoretical material, repetition of tasks solving methods		
Topic 9. Technology of work on the dissertation. Presentation, protection and implementation of the result	<i>Classroom work</i>			
	Lecture	Topic 9. Technology of work on the dissertation. Presentation, protection and implementation of the result	Express testing	
	Practical class	Presentation of reports and essays, their discussion	Scientific report	40
	<i>Individual work</i>			
	Preparation for classes	Repetition of theoretical material, repetition of tasks solving methods		

Recommended literature

Primary literature

1. Guidelines to self-study on the academic discipline "Basis of scientific research" for students of training directions 6.030601 "Management" , 6.140103 "Tourism" of all forms of study [Electronic resource] / compiled by O. Myronova, O. Mazorenko; Simon Kuznets Kharkiv national university of economics. – E-text data (124 KB). – Kharkiv : Publishing House of S. Kuznets KhNUE, 2016. – 41 p.

2. Guidelines for carrying out practical tasks on the academic discipline "Basis of Scientific Research" for students of training directions 6.030601 "Management", 6.140103 "Tourism" of all forms of study / compiled by O. Myronova, O. Mazorenko. – Kharkiv : Publishing House of S. Kuznets KhNUE, 2015. – 40 p.

3. Pushkar O.I. Methodology and organization of scientific research [Electronic resource]: study guide / O. I. Pushkar. – Kharkiv: Publishing House of S. Kuznets KhNUE, 2020 – 867 p.

Secondary literature

4. International organizations: study guide / compilers: T. V. Androsova, O. V. Kot, V. O. Kozub; second edition, reviewed and added. – Kharkiv: KhDUHT, 2018. – 235 p.

Internet resources

5. Business Dictionary – [Electronic sources]. – Access mode : <http://www.businessdictionary.com/definition/>

6. Data and Statistics about the U.S. – [Electronic sources]. – Access mode : <https://www.usa.gov/statistics/>

7. Digital economy and society statistics – households and individuals – [Electronic sources]. – Access mode : <https://ec.europa.eu/eurostat/statistics->

[explained/index.php/Digital_economy_and_society_statistics_-_households_and_individuals/](#)

8. EU Statistics – [Electronic sources]. – Access mode : <https://ec.europa.eu/eurostat/home/>

9. Official website of the National Bank of Ukraine. – [Electronic sources]. – Access mode : <http://www.bank.gov.ua/>

10. Official website of the Statistic State Committee. – [Electronic sources]. – Access mode : <http://www.ukrstat.gov.ua/>

11. Portal Site of Official Statistics of Japan. – [Electronic sources]. – Access mode : <https://www.stat.go.jp/english/>

12. REGULATIONS on the training of higher education applicants for the doctor's degree of philosophy at Simon Kuznets Kharkiv National University of Economics – [Electronic sources]. – Access mode : <https://www.hneu.edu.ua/en/wp-content/uploads/sites/3/2019/09/Polozhennya-pro-pidgotovku-v-aspiranturi-2018.pdf>

13. Simon Kuznets KhNUE Personal Learning System Site «Methodology and Organizing of Scientific Researches» [Electronic sources]. – Access mode : <https://pns.hneu.edu.ua/course/view.php?id=9301>

14. Ukrainian legislation [Electronic sources]. – Access mode : <http://zakon1.rada.gov.ua/laws/show>