

Description of Discipline

Title of Discipline: <i>Methodology, Organization and Technology of Scientific Research</i>					
Semester	Duration	Type of Discipline	ECTS Credits	Academic Workload	Language of Instruction
1, 2, 3	270 hrs.	compulsory	9	80 hours of classroom training, 190 hours of self-study.	English
Learning Outcomes		Teaching Methods		Evaluation Methods	
LO 1. Knowledge and understanding of research methods, abilities and skills to use PhD research methods.		Lectures, laboratory work, educational tasks		Testing, evaluation, pass-fail test, exam	
LO 9. Knowledge, understanding, abilities and skills in using citation and reference rules to sources used, rules of bibliographic design, understanding of the content and procedure for calculating basic quantitative scientometric indicators of scientific activity efficiency (citation index, h-index, impact factor).		Explanation, citation, abstracting		Abstracts, pass-fail test, exam	
LO 15. Skills in organizing creative activity and the process of scientific research, using modern technologies of scientific work, evaluating and ensuring the quality of work performed.		Problem tasks, laboratory work, presentation, online teaching		Essay, evaluation using a PC, pass-fail test, exam	
LO 24. Skills in communicating with a wide scientific community and public in the field of scientific and/or professional activity with the purpose of (1) discussing controversial issues, research results and coordinating actions and joint work at conferences, scientific seminars; (2) bringing research results and innovations to colleagues; (3) presenting, defending the research results, discussing them with the scientific and professional community; (4) using modern means of visual presentation of research results.		Explanation, discussion, watching videos		Combined evaluation, pass-fail test, exam	

Requirements for Participation	Type of examination (oral, written, term paper, etc.)	Methods of teaching and learning (lectures, seminars, etc.)	Discipline Coordinator
Master's degree	1 semester – written pass-fail test, 2 semester – written pass-fail test, 3 semester – written exam	Lectures and laboratory work	Zosymenko T.

Learning Outcomes
<p>GC 1. Research ability. Competence in conducting research at the level of Doctor of Philosophy, making informed decisions, solving problems and solving scientific and applied problems. Ability to abstract thinking, analysis and synthesis, substantiation and modeling of problems. Ability to search and analyze information from various sources. Ability to use modern information technologies, computer tools and programs.</p> <p>GC 2. Creativity. The ability to generate new scientific-theoretical and practical ideas, to find their own ways to solve the problem. Ability to identify contradictions and previously unsolved problems, problems or parts of them, to formulate and experimentally test scientific hypotheses. Ability to apply knowledge in practice.</p> <p>GC 3. Communication skills. Ability to understand foreign language professional texts, use a foreign language to present scientific results orally and in writing and to communicate in an international general, scientific and professional environment.</p> <p>GC 4. Group and project work. Competence in the development, planning and implementation of research and innovation projects and programs. Ability to work in a scientific and professional group with ethical commitment. Ability to lead, evaluate and ensure the quality of work performed, initiate and implement projects.</p> <p>GC 5. Ability to work independently, be critical and self-critical. Ability to find their own ways to solve the problem, to critically perceive and analyze other people's thoughts and ideas, to review publications and abstracts, to conduct a critical analysis of their own materials.</p> <p>GC 6. Teaching abilities. Competence in pedagogical activities for the organization and implementation of the educational process, teaching, education, development and training of students for a particular type of professionally-oriented activities.</p> <p>GC 3. Ability to criticize and evaluate. Competence in conducting a critical analysis of various information sources on the topic of the dissertation. Competence in public presentation and defense of research results. Ability to engage in critical dialogue in the field of economic research, international scientific discussions, expressing and defending one's own position. Scientifically substantiated evaluation of the obtained results.</p> <p>GC 4. Innovation and professionalism. Ability to generate business ideas and show initiative in the implementation and production use of research results. Competence in innovative teaching methods and teaching methods of professional economic disciplines.</p> <p>PLO 1. Knowledge and understanding of research methods, ability and skills to use research methods at the level of Doctor of Philosophy.</p> <p>PLO 9. Knowledge, understanding, skills and abilities to use citation rules and references to used sources, rules of bibliography, understanding of the content and procedure of calculations of basic quantitative scientometric indicators of scientific efficiency (citation index, Hirsch index (h-index), impact- factor (IF, or IF)).</p> <p>PLO 10. Knowledge and understanding of the structure of higher education in Ukraine, the specifics of professional and pedagogical activities of higher education teachers.</p> <p>PLO 12. Ability to track the latest achievements in the professional field and find scientific sources relevant to the scientific interests of the applicant, work with different sources, search, process, analyze and synthesize the information obtained</p>

PLO 13. Ability and skills to work with modern bibliographic and abstract databases, as well as scientometric platforms (for example, Scopus, Web of Science, Web of Knowledge, Astrophysics, PubMed, Mathematics, Springer, AgriSearch, GeoRef and others).

PLO 14. Ability and skills of understanding scientific articles in the field of the chosen specialty., To analyze information sources, to reveal contradictions and not solved problems (problems) or their parts, formulation of scientific hypotheses.

PLO 15. Ability and skills to organize creative activities and the process of conducting scientific research, to use modern technologies of scientific work, to evaluate and ensure the quality of work performed.

PLO 16. Ability and skills to critically perceive and analyze other people's thoughts and ideas, to look for their own ways to solve the problem, to conduct a critical analysis of their own materials, to generate their own new ideas, to make informed decisions.

PLO 17. Ability to develop and implement projects and programs of processes and systems, as well as their structural elements in the field of economics.

PLO 19. Ability and skills to organize creative activities, work on articles and reports, perform independent original and suitable for publication research in the field of social and behavioral sciences of economic orientation, carefully research and comprehend various relationships and interactions (technological, organizational, legal, etc.) within the economic sciences, to conduct research to improve their efficiency, to organize self-verification of compliance of dissertation materials with the established requirements.

PLO 24. Ability and skills to communicate in dialogue with the general scientific community and the public in the field of scientific and / or professional activities to discuss issues, research results, coordination of actions and joint work at conferences, symposia, scientific seminars, to prove research results and innovations to colleagues, publicly present, defend the results of their research, discuss them and discuss with the scientific and professional community, use modern means of visual presentation of research results

PLO 25. To associate oneself as a member of civil society, the scientific community, to recognize the rule of law, in particular in professional activities, to understand and be able to exercise one's rights and freedoms, to show respect for the rights and freedoms of others, including team members.

PLO 26. Ability to organize and conduct conferences, round tables, seminars, etc. in native and foreign languages.

PLO 27. Be able to use communication technologies to maintain harmonious business and personal contacts as a prerequisite for business success.

Contents

MODULE 1. METHODS OF CONDUCTING SCIENTIFIC RESEARCH

Topic 1.1. Science as a sociocultural phenomenon and its place in the modern world

Topic 1.2. Forms of organization of scientific knowledge. Basic worldview principles of dialectics. Theory and principles of theory development. Types of theories.

Topic 1.3. Characteristics of scientific activity. Features of an individual scientific activity. Features of a group scientific activity. Implementation of research results.

Principles of scientific knowledge

Topic 1.4. Means and methods of scientific research. Methods for processing research results: methods of the qualitative analysis, methods of the quantitative analysis.

Topic 1.5. Structure of scientific research.

MODULE 2. FEATURES OF ORGANIZATION OF SCIENTIFIC AND EDUCATIONAL ACTIVITY

Topic 2.1. Introduction to the methodology of educational activity.

Topic 2.2. Characteristics of educational activity. Features of educational activity. Principles of educational activity.

Topic 2.3. Structure of educational activity. Forms of educational activity. Methods of educational activity. Means of educational activity. Classification of study modes: full-time, part-time, evening-time, self-study.

Topic 2.4. Organization of educational activity. Educational projects.

Topic 2.5. Organization of teamwork and relationships within a scientific group. Basic principles for arranging activity of a scientific group. Structural organization of a scientific group and methods of research management.

MODULE 3. RESULTS OF SCIENTIFIC RESEARCH: RESULTS' DOCUMENTATION, PRESENTATION AND IMPLEMENTATION

Topic 3.1. Specificity and construction of a scientific text. Scientific text and its functions. Text modeling. Information bases of scientific research.

Topic 3.2. A basic structure of scientific text.

Topic 3.3. PhD dissertation as a special type of scientific text. Structure of the dissertation. Execution of the dissertation.

Topic 3.4. Presentation of research results. Basic rules of preparation for public speaking. Structure of a presentation. The rule of effective public presentations.

Topic 3.5. Implementation of research results.

Exemplary Literature

Primary

1. Gutorov O.I. Methodology and organization of scientific research: textbook. manual / O.I. Gutorov; Khark. nat. agrarian. Univ. V.V. Dokuchaeva - H. : KhNAU, 2017. - 272 p.
2. Vazhinsky S.E. Methods and organization of scientific research: Textbook / S.E. Vazhinsky, T.I. Scherbak. - Sumy: Sumy State Pedagogical University named after A.S. Makarenko, 2016. - 260 p.
3. Mokin B.I. Methodology and organization of scientific research: textbook / B.I. Mokin, O.B. Mokin. - Vinnytsia: VNTU, 2014. - 180 p.
4. Panishev A.V. Research methodology: textbook. manual / A.V. Panishev. - Zh. : ZhDTU, 2013. – 148 p.
5. Chmilenko F.O. Manual for studying the discipline 'Methodology and organization of scientific research' [Text] / F.O. Chmilenko, L.P. Zhuk. - D. : RVV DNU, 2014. - 48 p.
6. Shvets F.D. Methodology and organization of scientific research. Tutorial. - Rivne: NUVGP, 2017. - 151 p.

Supplementary

1. Stechenko D.M. Methodology of scientific research: Textbook / D.M. Stechenko, OS Chmir. - K.: Znannia, 2005. - 309 p.
2. Bhattacharjee A. Social Science Research: Principles, Methods, and Practices [Electronic resource] / A. Bhattacharjee // USF Tampa Library Open Access Collections. – URL: http://scholarcommons.usf.edu/cgi/viewcontent.cgi?article=1002&context=oa_textbooks
3. Lakatos I. The Methodology of Scientific Research Programmes: Volume 1: Philosophical Papers / I. Lakatos. – Cambridge University Press, 1980. – 260 p.

Web resources

1. Vernadsky National Library of Ukraine [Electronic resource]. – URL: <http://www.nbuv.gov.ua>
2. National Library of Ukraine named after Yaroslav the Wise [Electronic resource]. – URL: <http://nlu.org.ua/>

Academic staff

Name	Academic degree	Position	Qualification / Academic Discipline	Full-time / Part-time	Area of Teaching
Zosyenko Tetiana Ivanivna	PhD in Economics	Associate Professor at the Department of	Chernihiv State Technological University (2005), Bachelor in	Part-time	Methodology, Organization and Technology of Scientific Research

		Theoretical and Applied Economics	Economics and Entrepreneurship (2006); Accounting and Audit, Specialist in Accounting and Audit; PhD in Economics – 08.00.03 Economics and Management of National Economy; Associate Prof. at the Department of Economic Theory and Business Economics		
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