

Syllabus Course Program



Methodology of organization of scientific research and methodology of scientific texts' writing

Specialty

054 – Sociology

Educational program

Sociological support of economic activity

Level of education

Master's level

Semester

1

Institute

Institute of Socio-Humanitarian Technologies

Department

Department of Sociology and Public Administration (305)

Course type

Special (professional), Mandatory

Language of instruction

English, Ukrainian

Lecturers and course developers



Volodymyr Moroz

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Doctor of Science in Public Administration, Professor, Head of the Department of Sociology and Public Administration

Professional experience - 33 years.

The author of 246 scientific and methodological publications, 7 of which are published in journals included in the Scopus and WoS scientometric databases. He completed an internship at the Regional Institute of Administration (Lille, France), the Tampere University (Tampere, Finland) and the Baltic International Academy (Riga, Latvia). The author and organizer of several large in scale of respondents coverage sociological researches (co-organized by representatives of the scientific community of Latvia, Finland and China) on the problems of labour potential and quality of higher education. Member of the specialized scientific council for the defense of dissertations of the level of Doctor of Science. Member of the expert group of the Ministry of Education and Science of Ukraine on professional pedagogy, psychology and the content of professional (professional and technical) education. Member of the editorial boards of three scientific publications, two of which have the status of professional ones.

[More about the lecturer on the department's website](https://web.kpi.kharkov.ua/sp/profesors-ko-vikladats-kij-sklad/)

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General information

Summary

The academic discipline "Methodology of organization of scientific research" provides formation of solid (systemic) knowledge of methodology, theory of method and process, methodological support of research activities, formation, development and justification of ways and methods of effective problem solving, obtaining of theoretical knowledge and practical skills by graduate students in the process of making a research work.

Course objectives and goals

The goal of the course – is to form among applicants an integral and logical-consistent system of knowledge for organizing and conducting scientific researches; prepare applicants for education for independent work on the text of course and master's works, as well as on manuscripts of scientific publications.

Format of classes

Lectures, laboratory classes, consultations, self-study. Final control in the form of an exam.

Competencies

GC01. Ability for abstract thinking, analysis and synthesis.

GC02. Ability to work independently.

GC05. Ability to assess and ensure the quality of performed tasks.

SC01. Ability to analyze social phenomena and processes.

SC02. Ability to detect, diagnose and interpret social problems of Ukrainian society and the global community

SC03. Ability to design and fulfill sociologic research, to develop and substantiate their methodology.

SC04. Ability to collect and analyze empirical data with the use of present-day sociologic research methods and digital technologies.

Learning outcomes

PR01. To analyze social phenomena and processes using empirical data and present-day concepts and theories in sociology.

PR02. To perform diagnostics and interpretation of social problems of Ukrainian society and the global community, of the causes for their arising and their consequences.

PR05. To perform search, analysis and evaluation of the necessary information in the scientific literature, data bases and other sources.

PR09. To plan and carry out scientific research in the field of sociology, to analyze its outcomes and substantiate the conclusions.

Student workload

The total volume of the discipline is 150 hours (5 ECTS credits): lectures - 32 hours, practical classes - 32 hours, independent work - 84 hours.

Course prerequisites

«Methodology and methods of sociological research», «Philosophy».

Features of the course, teaching and learning methods, and technologies

During the lecture sessions on the academic discipline, the following teaching methods are used: explanatory and illustrative methods (demonstration of presentation slides on the screen, visualization of educational material); method of problem presentation; partially-search, or heuristic method (lectures on certain topics are taught in a problematic form). During the seminars can be used following methods: reproductive method (assimilation of basic concepts of the course); partially-search or heuristic method (while preparing of individual projects); research method (students independently study literature, resources, conduct research, measurements and perform other search actions to create a presentation on a given topic). Seminars can be built in the form of a discussion.

Program of the course

Topics of the lectures

Topic 1. Introduction to the discipline “Methodology of organization of scientific research and methodology of scientific texts’ writing”.

The place and role of science in ensuring the socio-political and socio-economic development of humanity. Scientific inventions that changed the world. Approaches to the interpretation of the categorical content of the definition of “science”.

Topic 2. Basic categories of methodology of organization of scientific research : General characteristics of the content and features of its manifestation.

Approaches to the interpretation of the categorical content of “methodology”. Subject of methodology studies. System, levels and classification groups of methodology. Methodology’s functions in science. Approaches to the interpretation of the category “scientific research”

Topic 3. Classification (typologization) of scientific researches.

Classification of sciences. Classification of scientific researches and characterization of the content of the main classification groups.

Topic 4. Dialectics of unity of scientific approaches, principles and methods in the framework of scientific research

Approaches of scientific knowledge. Principles of scientific knowledge.

Topic 5. Methods of scientific researches.

Methods of scientific researches: categorical content of definition interpretation. General classification of scientific research methods. General characteristics of the main methods of scientific research.

Topic 6. Information support of scientific researches.

Documentary sources of information. Kinds of scientific documents. Reference documents and standards. organization of examination of scientific texts. Informational and bibliographic sources of information. Technique of working with special literature. Electronic search for scientific information.

Topic 7. Scientific publication: concepts, functions and main types.

Definition of scientific publication as a result of the researcher's intellectual and creative activity. Functions of scientific publication. Varieties of scientific publications and their general characteristics.

Topic 8. Algorithm for preparing a scientific publication and its structure.

Algorithm for the preparation of scientific publication. Structure of the scientific article.

Topic 9. Basic requirements for designing and submission of scientific publications.

Typical content of the requirements for designing and submission of scientific publications (on the example of the international electronic scientific professional publication “Information Technologies and Learning Tools”). List of professional publications in psychological and pedagogical sciences.

Topic 10. List of literature used: requirements for design and features of the presentation in the references format.

The order of the bibliographic description in the list of literature. Rules for designing of references transliterated in the Romance alphabet (Latin).

Topic 11. Popularization of scientific publication on the Internet.

Directions of popularization of scientific publications on the scientist. Possibilities of the electronic repository of the National Technical University “Kharkov Polytechnic Institute” in the popularization of the scientist's (researcher's) scientific publications.

Topics of the workshops

Topic 1. The place and role of science in ensuring the socio-political and socio-economic development of the country. The place and role of science in ensuring the personality's individual development.

Topic 2. History of the science's origin and development (global and regional context).

Topic 3. Actual directions in the organization of scientific research within the field relevant to the speciality (global and regional context).

Topic 4. Principles and methods of scientific knowledge in the system of humanitarian knowledge

Topic 5. The place and role of a systematic approach in the organization and support of scientific research.

Topic 6. Problems of formation of scientific thinking at the present stage of development of the field of science.

Topic 7. Potentials, advantages and disadvantages of theoretical researches.

Topic 8. Features of the formation and organization of the work of the scientific team.

Topic 9. Features of the choice of the research topic and the technology of organizing its conducting.

Topic 10. Master's thesis: features of structuring and writing technology.

Topic 11. Normative and legal basis for formation of rules of academic integrity and ethics of scientific research.

Topic 12. Potentials of information and communication technologies to ensuring of scientific researches and popularization of their results.

Topic 13. The place and role of scientific publication in the development of the scientist's scientific and pedagogical potential.

Topic 14. Domestic and foreign traditions in the preparation of scientific publications' manuscripts: the content and features of manifestation.

Topic 15. Requirements for the design and submission of scientific publications.

Topic 16. Mechanisms of popularization of scientist's scientific publications, as well as algorithms for their use in practice.

Topics of the laboratory classes

Laboratory work is not included in the course

Self-study

In the framework of the thematic direction of the content of the academic discipline, each student is invited to perform individual tasks. The subjects of individual tasks are coordinated with the teacher with taking into account the educational (scientific) interests of each specific listener. In addition, each student must prepare abstracts of the report to participate a scientific and communicative event or a manuscript of a scientific article or complete the below formulated task. The thematic orientation of the manuscript of scientific work should correspond to the content of one of the academic disciplines provided for by the educational and professional program.

Course materials and recommended reading

1. *Academic integrity: modern challenges: a collection of scientific essays by participants of the remote stage of scientific training for educators (Republic of Poland, Warsaw, 02.12 - 13.12.2019). Polish-Ukrainian Foundation "Institute of International Academic and Scientific Cooperation", Theological Academy of Cardinal Stefan Wyszyński University, ADD Foundation. Warsaw, 2019. 148 p. URL:*

<https://www.iiasc.org/academichna-dobrochestnist/>

2. *Vazhinsky S.E., Shcherbak T.I. Methodology and organization of scientific research: teaching. manual Sumy: Sumy DPU named after A.S. Makarenko, 2016. 260 p. URL:*

<https://pedagogy.lnu.edu.ua/wp-content/uploads/2017/03/vajinskii-posibnyk.pdf>

3. *Moroz V.M., Moroz S.A., Tereshchenko D.A. Methodology of writing scientific texts and requirements for their preparation for printing. Kh.: NTU "KhPI", 2022. 90 p. URL: http://web.kpi.kharkov.ua/sp/wp-content/uploads/sites/95/2022/09/Navchalnij_kontent_OND.docx*

4. *Medvid V., Danko Yu., Koblyanska I. Methodology and organization of scientific research (in structural and logical diagrams and tables). Kyiv: University Book, 2020. 219 p. URL:*

http://library.megu.edu.ua:8180/jspui/bitstream/123456789/2508/1/20201113_100711.pdf

5. *Methodology and organization of scientific research: teaching. manual / (I.S. Dobronravova, O.V. Rudenko, L.I. Sydorenko, etc.); under the editorship I. S. Dobronravova (part 1), O. V. Rudenko (part 2). - K.: VOC "Kyiv University", 2018. - 607 p. URL: <http://www.philsci.univ.kiev.ua/biblio/Methodol.pdf>*

6. *Methodology and organization of scientific research (fields of knowledge: 05 – social and behavioral sciences, 07 – management and administration): education. manual / L. G. Lypych, S. M. Bortnik, I. G. Volynets, and others. ; in general ed. L. G. Lypych. – Lutsk: Vezha-Druk, 2018. – 220 p. URL: https://evnuir.vnu.edu.ua/bitstream/123456789/16477/1/MOND_2018_posibnyk.pdf.*

7. *Bailey S. Academic Writing: a Handbook for International Students. London: Routledge, 2014. 304 p. URL: https://edisciplinas.usp.br/pluginfile.php/5761016/mod_resource/content/1/Academic%20Writing%20Bailey%203rd%20Edition.pdf*

8. *Betz F. Managing science: Methodology and organization of research. New York: Springer, 2010. 420 p. URL:*

https://fmipa.umri.ac.id/wp-content/uploads/2016/03/Frederick_Betz_Managing_Science_Methodology_and_dBookFi.org_2.pdf

10. *Robinson P. Academic Writing: Process and Product. Hong Kong: British Council, 2010. 176 p. URL: https://www.teachingenglish.org.uk/sites/teacheng/files/ELT-14-screen_0.pdf*

Assessment and grading

Criteria for assessment of student performance, and the final score structure

Points are allocated according to the following ratio:

- current testing: 36% of semester assessment;
- independent work in the form of writing an essay and performing individual work: 24% of the semester assessment;
- exam: 40% semester assessment.

Grading scale

<i>Total points</i>	<i>National</i>	<i>ECTS</i>
90–100	Excellent	A
82–89	Good	B
75–81	Good	C
64–74	Satisfactory	D
60–63	Satisfactory	E
35–59	Unsatisfactory (requires additional learning)	FX
1–34	Unsatisfactory (requires repetition of the course)	F

Norms of academic integrity and course policy

The student must adhere to the Code of Ethics of Academic Relations and Integrity of NTU "KhPI": to demonstrate discipline, good manners, kindness, honesty, and responsibility. Conflict situations should be openly discussed in academic groups with a lecturer, and if it is impossible to resolve the conflict, they should be brought to the attention of the Institute's management.

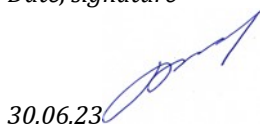
Regulatory and legal documents related to the implementation of the principles of academic integrity at NTU "KhPI" are available on the website: <http://blogs.kpi.kharkov.ua/v2/nv/akademichna-dobrochesnist/>

Approval

Approved by

Date, signature

30.06.23



Head of the department

Volodymyr MOROZ

Date, signature

30.06.23



Guarantor of the educational program

Yuriy KALAHIN