

**Ministry of Education and Science of Ukraine**  
**West Ukrainian National University**  
**B.Havrylyshyn Education and Research Institute of International Relations**

**Department of International Economic Relations**

**METHODOLOGICAL GUIDELINES**  
**ON**  
**SCIENTIFIC RESEARCH WORK**

for the students of the educational and research program  
«International Management»  
second (Master`s) level of higher education  
speciality 073 «Management»  
Field of knowledge 07 «Management and Administration»

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## GENERAL PROVISIONS

Research is an effective way of forming and developing students' motivation for creativity, responsibility, and independence, as well as implementing an individual approach to education and training fully.

Research is one of the most important means of improving training quality of higher education specialists who can apply scientific and technological progress in practice creatively and, therefore, quickly adapt to the conditions of current economic development. The main goal of the research is to form and strengthen the creative abilities of applicants, develop and improve forms of involving young people in scientific, design, technological, creative and innovative activities that ensure the unity of educational, scientific and educational processes to improve the vocational and technical level of higher education specialists training.

**The purpose and objectives of the research paper.** The main goal of the research is to acquire practical skills in independent research and analytical activities and to form a scientific and information base to complete the final qualification paper. The objectives of the research are as follows:

- development of creative thinking and initiative in solving practical problems;
- development of inclination to research, the desire to find non-standard solutions to professional problems;
- expansion of theoretical outlook and scientific erudition;
- mastery of the methods of scientific knowledge, in-depth and creative mastery of educational material;
- development of research skills, mastering the methods and means of solving scientific and practical problems, mastering the skills of working in creative teams, familiarisation with the methods of organising their work;
- development of skills in working with scientific literature;
- development of the ability to competently design and present scientific results.

The topic of the research paper must correspond to the chosen topic of the

qualification paper. It should be presented as a scientific presentation at a department research seminar and prepared as a scientific article or conference abstract for publication.

The research work is focused on the development of the following competences:

GC1. Ability to conduct research at the appropriate level;

GC3. Skills in the use of information and communication technologies;

GC5. Ability to act based on ethical considerations (motives);

GC6. Ability to generate new ideas (creativity);

GC7. Ability to think abstractly, analyse and synthesise.

SC1. Ability to select and use management concepts, methods and tools, including defined goals and international standards;

SC2. Ability to establish values, vision, mission, goals and criteria by which the organisation determines further ways of development, to develop and implement appropriate strategies and plans;

SC3. Ability to self-development, lifelong learning and effective self-management;

SC7. Ability to develop projects, manage them, show initiative and entrepreneurship;

SC9. Ability to plan and carry out scientific and applied research and present their results;

SC11. Ability to independently master new knowledge, use modern educational and research technologies in the field of management;

SC12. Ability to formulate modelling problems, create and study mathematical and computer models, and apply statistical methods and models to analyse objects and processes in the field of management;

SC13. Ability to make administrative decisions and develop corporate policies to achieve business goals in the international environment;

SC 4. Ability to develop proposals for areas of investment activity and participation in global production structures and clusters as ways to improve the efficiency of corporate governance in the international environment

The implementation of these competences allows the following programme results:

PLO1. To critically comprehend, select and use the necessary scientific, methodological and analytical tools for management in unpredictable conditions;

PLO2. To identify problems in the organisation and justify methods of their solution

PLO3. To design effective management systems for organisations;

PLO4. To justify and manage projects, generate entrepreneurial ideas;

PLO5. To plan the organisation's activities in strategic and tactical terms;

PLO6. To possess the skills to make, justify and ensure the implementation of management decisions in unpredictable conditions, taking into account the requirements of current legislation, ethical considerations and social responsibility;

PLO8. To apply specialised software and information systems to solve organisational management problems;

PLO11. To possess the skills to ensure personal and professional development and time management;

PLO12. To plan and conduct research, demonstrate the results of scientific research and prepare them for publication;

PLO14. To create and study conceptual, mathematical and computer models of objects and processes in the field of management;

PLO15. To identify and classify new tasks in the field of management; to describe, analyse and evaluate relevant objects, phenomena and processes; to choose the best methods of their research;

PLO 16. To apply optimal mechanisms of crisis management in international business;

PLO 17. To develop a comprehensive plan of anti-crisis measures, anticipate crises and make appropriate management decisions.

## ORGANISATION OF RESEARCH

To ensure a systematic approach to planning, organizing and stimulating research activities, it is important to identify the main types of research. Based on the content and procedure of R&D, the following types can be distinguished:

- Research embedded in the educational process;
- Research that complements the educational process;
- Research carried out in parallel with the training process.

The main ways of organising research and development are

- Teaching and research within the curriculum;
- Inclusion of R&D elements in teaching;
- individual research by students, i.e. their participation in the development of a specific problem under the guidance of a specific research supervisor from the teaching staff;

- conducting research and development during the traineeship;
- Participation of candidates in the implementation of research projects funded from various sources (state budget, contracts, grants, etc.);

- Participation of candidates in scientific organisational and competitive events at various levels (departmental, faculty, regional, national, international) that stimulate both the development of the research and development system and the creativity of each candidate. These include: scientific seminars, conferences, symposia, reviews/competitions of scientific and research papers;

- involving applicants in various forms of participation in research and innovation activities.

*The main areas of focus for research and development activities are as follows:*

- Enhancing the quality of the educational process through the joint participation of students and teachers in carrying out various research activities;
- Participation of students in applied, exploratory and fundamental research;

Supporting and nurturing scientific schools in universities to ensure a smooth transfer of knowledge across generations.

- Developing students' ability to make independent, well-founded scientific judgements and conclusions.

## **RESEARCH METHODS**

Various research methods are used to identify development trends, laws and management principles.

1. Dialectical method. It studies the phenomena of development, i.e. the interdependent and contradictory development of the phenomena of reality.

2. Specific historical method. It involves the study of the phenomenon under study in its development, considering the causes, conditions and factors that led to the changes.

3. Systemic method. Considering all existing interrelations, it appears as a set of methodological tools, procedures, and techniques to study complex objects.

4. Analytical method. It consists in dividing the whole into parts and considering them as a whole. It is applied to complex phenomena and objects.

5. Balance method. It is used to measure the effect of factors on a generalised indicator.

6. Modelling methods (verbal, physical, analogue, mathematical). They are used when the complexity of the relationships makes it impossible to study the evolution of an object under the influence of different factors.

7. Expert methods. They are used when it is impossible to quantify specific parameters.

8. Economic and mathematical methods. These include economic and mathematical methods used to study random or probabilistic phenomena and identify patterns among randomness. These include economic and mathematical methods used to study random or probabilistic phenomena and identify patterns among randomness.

9. Sociological methods such as questionnaires, interviews, and testing are based on sample surveys of target respondents.



The methods of collecting information include direct observation, surveys, photography, and timekeeping. Direct observation involves examining the phenomena under study. Surveys involve recording the responses of the interviewees. Photography involves observing and measuring time spent during a shift according to their sequence. Timekeeping involves observing and measuring the operational time spent, which is repeated cyclically when a particular operation is repeatedly performed.

Statistical observation is a scientifically organised record of factors about the phenomena under study and the collection of mass primary data based on the record.

Methods of data collection, processing, and evaluation are crucial in any research. The following methods are commonly used in this regard:

1. Registration of single events through observation, surveys, or document review.
2. Data collection through continuous, sample, or monographic surveys.
3. Data processing and analysis using methods such as description and classification, typology, system analysis, and statistical analysis.

When it comes to sociological research, the following methods are commonly used:

1. Survey method: A survey can be conducted either in absentia by distributing, collecting, and processing questionnaires or by conversing with the respondent through interviews.
2. Method of expert assessments: This method involves studying the opinions of specialists with in-depth knowledge and practical experience in management. The experts are selected from both academics and practitioners (no more than 20-30 people), and their competence is determined using various methods.

The expert survey can be individual or group, in-person or by correspondence. An individual survey is conducted through a questionnaire or interview. A group survey can be conducted as a roundtable discussion where experts exchange views.

The empirical material collected using the above methods must be summarised and analysed. For this purpose, various summary, grouping and statistical analysis methods are used.

The processing of economic information involves various methods, such as grouping, calculating relative and average sizes, using indicators of variation, developing tables, creating graphical representations, constructing dynamic series, calculating indices, and establishing cause-and-effect relationships among the phenomena under study.

The method of similarity is based on the assumption that the causes or effects being compared are similar. It is used to determine the cause of a phenomenon that occurs in different conditions.

The method of difference is used when the phenomenon under study is present in some cases and absent in other similar cases.

The method of concomitant changes is used when there is a close internal relationship between the cause and effect, in which they are unambiguously linked.

The residuals method is used when studying a complex set of prior circumstances, where one part of the components of this complex has already been studied, and the other is to be studied.

Elimination method - a residual method used in economic research, according to which factors that do not directly affect the economic result are excluded.

## **STAGES OF RESEARCH**

**STAGE 1. Introduction.** It states the problem statement and highlights the relevance of the chosen topic. The research's relevance is the chosen topic's importance and practical significance. The topic of the research paper should reveal the relevance of the problem and meet the modern requirements of economic science. The research objectives should reveal the problem's essence and phased solution of the problem and formulate ways to improve a particular process, phenomenon, system, etc.

STAGE 2. The central theoretical part. In this part of the study, it is necessary to reveal the theoretical foundations of the chosen research topic, using modern scientific approaches and publications of leading domestic and foreign scholars in this field. In addition, the basic terms and concepts related to the research topic should be explained.

STAGE 3. Research strategy. A research paper should contain the following research elements:

- analysis of a sufficient number of literary sources on the subject matter;
- systematisation and analysis of different opinions and approaches to solving the chosen problem, formation of the researcher`s point of view;
- Comparison of theoretical views of scientists and practical activities;
- drawing up the results of the study;
- development of conclusions and recommendations;
- presentation of research results.

## **TYPES OF PRESENTATION OF RESEARCH RESULTS**

There are various ways to present research results, depending on the material's purpose, scope, and nature. These include abstracts, scientific articles, reports, theses, research reports, scientific reviews, dissertations, and textbooks. Scientific articles, abstracts, and speeches are commonly used to prepare scientific reports and masters.

A *scientific article* is a written communication that presents a well-founded system of scientific views that addresses issues that have yet to be studied sufficiently within a specified scope. The title of the article should reflect the main idea of its content. A scientific article includes the relevance of the stated topic, argumentation of the author's concept, and specific and well-grounded conclusions. The value of a scientific article is determined by the content, degree of novelty and depth of the author's ideas and proposals.

Abstracts are brief summaries of the key points of a research paper. They are typically issued before the start of a scientific conference to introduce the participants

to the topics that will be presented. An abstract enables the scientific community to approve the author's research topic. Unlike a scientific article, an abstract does not reveal the essence of the proposals. The main requirements for abstracts are brevity and informativeness. In terms of composition, they can be a mini-article with content elements (introduction, main body, conclusion) or a numbered list of critical points (goals and objectives, research methods, results and conclusions) that will be discussed in the oral presentation.

Scientific report - a scientific report intended for public presentation. 10-20 minutes are allocated for the presentation of reports. 2-3 key research questions are expected to be considered. The introduction describes the topic's essence and states the points discussed in the report's central part. It is recommended to plan the presentation so that the points to be discussed reveal the main idea of the author's research. Particular attention should be paid to the logic of the evidence, avoiding contradictions and repetitions. When presenting scientific results publicly, one should take time to formulate the points to be discussed and use illustrative material.

## **RESEARCH PAPER STRUCTURE**

1. The problem statement is a mandatory part of every research project, especially an article in which the author indicates its relevance. The relevance of a topic refers to its importance, significance, and pertinence to the current needs of a specific scientific field and its potential for development, as well as to the practical tasks of the relevant field of activity. In other words, by emphasizing the relevance of the research, the author explains why they believe that the chosen topic is worthy of scientific analysis and justifies the practicality of working with the current challenges. In this section, the author should state the logic behind the research and present the research material, theorem, and empirical results (approximately 1 page).
2. Analysis of the latest research and publications that initiated the solution to this problem and on which the author relies, highlighting previously unresolved parts of the general problem to which the article or other type of research is devoted (i.e., a

critical analysis of the latest research and publications on the problem under consideration, which should contain not only a list of authors but also the main conclusions of their works and comparative analysis) (for an article - about 1/2 page).

3. The purpose of a research paper is the result to which the entire study is directed; it expresses the main idea of this publication, which differs significantly from current ideas about the problem, complements or deepens the already known approaches; attention is drawn to the introduction of new facts, conclusions, recommendations, patterns or clarification of previously known but insufficiently studied ones. The purpose follows from the scientific problem statement and a review of the leading publications on the topic.

The purpose of the research is specified in the tasks formulated in the form of several specific stages, the description of which should establish the content of the sections of the research paper. The formulated tasks should reveal the content of the research paper.

4. Presentation of the primary research material with full justification of the scientific results obtained is the main section of the paper, which reveals the main content of the research; it highlights the main provisions and results of the research, personal ideas, opinions, scientific facts, identified patterns, relationships, trends, methods of obtaining and analysing factual material, the author's contribution to the achievement and implementation of the main conclusions, etc.

5. The conclusions of this study take the form of a synthesis of the scientific information accumulated in the central part of the study, i.e. a consistent, logical, clear statement of the main results obtained and their correlation with the overall goal and specific task set and formulated in the introduction; it formulates the main scientific idea of the author, the content of conclusions and recommendations, their significance for modern theory and practice; briefly outlines the prospects for further scientific research on the selected issue.

## SCALE AND CRITERIA FOR ASSESSMENT OF THE RESULTS OF WRITING AND DEFENSE OF SCIENTIFIC RESEARCH WORK

За шкалою університету	За національною шкалою	За шкалою ECTS
90-100	excellent	<p>A (excellent)</p> <p>The student has done an outstanding job on their research paper. It shows a high level of theoretical depth and empirical adequacy, a logical structure and sequence of presentation of the material, and the econometric model used aligns well with the research purpose. The paper demonstrates the use of the latest scientific sources and compliance of the research design with the applicable requirements. The student shows the completeness of disclosure of the research results during the research defence, a very high level of depth and versatility of the knowledge, systematic and logical presentation of the material, ability to make generalisations of the research results during the defence of the research paper.</p>
85-89	very good	<p>B (very good)</p> <p>The student's research paper has a high level of theoretical depth and empirical adequacy, logical structure and sequence of presentation of the material, relevance of the econometric model to the purpose of the research, use of the latest scientific sources, compliance of the design of the research in accordance with the current requirements, completeness of disclosure of research results during the defence of the research, high level of depth and versatility of the applicant's knowledge, systematic and logical presentation of the material, ability to analyse the ability to analyse the results of the research during the defence of the research paper.</p>
75-84		<p>C (good)</p> <p>The student's research paper has an above-average level of theoretical depth and empirical adequacy, logic, relevance and consistency of presentation of the material, compliance of the econometric model with the purpose of the research, use of the latest scientific and research sources, compliance of the research design with the applicable requirements, completeness of disclosure of research results during the research defence, above average level of depth and versatility of the applicant's knowledge, systematic and logical presentation of the material, ability to make generalisations of the research results during the defence of the research paper.</p>

65-74	satisfactory	<p>D (satisfactory)</p> <p>The student's research paper has a satisfactory level of theoretical depth and empirical adequacy, logical structure and sequence of presentation of the material, compliance of the econometric model with the purpose of the research, use of the latest scientific sources, compliance of the research design with the applicable requirements, completeness of disclosure of the research results during the research defence, satisfactory level of depth and diversity of the applicant's knowledge, systematic and logical structure of the material, ability to satisfactorily summarise the research results during the research defence.</p>
60-64		<p>E (sufficient)</p> <p>The student's research paper has a sufficient level of theoretical depth and empirical adequacy, logical structure and sequence of presentation of the material, correspondence of the econometric model to the purpose of the research, use of the latest scientific sources, compliance of the research paper with the requirements, completeness of disclosure of research results during the defence of the research paper, sufficient depth and diversity of the applicant's knowledge, systematic and logical structure of the material, ability to sufficiently analyse the research results during the defence of the research paper.</p>
35-59	unsatisfactory	<p>F (unsatisfactory with the possibility to resit)</p> <p>The student's research paper has an unsatisfactory level of theoretical depth and empirical adequacy, logical structure and sequence of presentation of the material, lack of knowledge of the scientific research method, lack of conformity of the econometric model with the purpose of the research, lack of use of the latest scientific sources, inconsistency of the design of the research with the current requirements, unsatisfactory level of disclosure of research results during the defence of the research paper, insufficient level of knowledge of the applicant, lack of systematic and logical presentation of the material, inability to make a conclusion inability to analyse the research results during the defence of the research paper.</p>
1-34		<p>FX (unsatisfactory with mandatory course repeat)</p> <p>The student's research paper has a shallow level of theoretical depth, lack of empirical adequacy, logic of presentation of the material, inconsistency of the material with the chosen research topic, and absolute non-compliance with the current formatting requirements.</p>

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