

**MINISTRY OF HEALTH OF UKRAINE  
BUKOVINIAN STATE MEDICAL UNIVERSITY**

**«APPROVE»**

Vice-Rector of higher educational establishment on  
Scientific and Pedagogical Work and  
International Relations

Oksana GODOVANETS

*[Signature]*  
« 28 » \_\_\_\_\_ 2025



**STUDENT GUIDE  
(SYLLABUS)  
of studying the discipline**

**«Presentation and Implementation of Research Results»**

**Field of knowledge** – 22 Health Care

**Specialty** – 221 Dentistry

**Educational degree** – Doctor of Philosophy (PhD)

**Form of study** – Full-time (day, evening), Part-time

**Department of Phthiology and Pulmonology**

Approved at a meeting of the department of Phthiology and Pulmonology  
«25» of August 2025 (Protocol № 1).

Head of the Department \_\_\_\_\_ *[Signature]* \_\_\_\_\_ Liliia TODORIKO  
(signature)

Approved by the subject methodical commission on Therapeutic disciplines  
«27» of August 2025 (Protocol № 7).

Chairman of the subject methodical  
commission \_\_\_\_\_ *[Signature]* \_\_\_\_\_ Viktor TASCHUK  
(signature)

## 1. GENERAL INFORMATION ABOUT SCIENTIFIC AND PEDAGOGICAL WORKERS WHO TEACH THE DISCIPLINE

<b>Department</b>	Department of Phthisiology and Pulmonology
<b>Surname, name of scientific and pedagogical staff, scientific degree, academic status, e-mail</b>	- Todoriko Liliia – DM, Professor, <a href="mailto:l_d_todoriko@bsmu.edu.ua">l_d_todoriko@bsmu.edu.ua</a> - Yeremenchuk Inha - PhD, Assistant Professor, <a href="mailto:ingae@bsmu.edu.ua">ingae@bsmu.edu.ua</a>
<b>Web page of the department on the official website of the university</b>	<a href="https://www.bsmu.edu.ua/ftiziatriyi-ta-pulmonologiyi/">https://www.bsmu.edu.ua/ftiziatriyi-ta-pulmonologiyi/</a>
<b>Department website</b>	<a href="https://sites.google.com/a/bsmu.edu.ua/kafedra-ftiziatriie-ta-pulmonologiie">https://sites.google.com/a/bsmu.edu.ua/kafedra-ftiziatriie-ta-pulmonologiie</a>
<b>E-mail</b>	<a href="mailto:pulmonology@bsmu.edu.ua">pulmonology@bsmu.edu.ua</a>
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## 2. GENERAL INFORMATION ABOUT THE DISCIPLINE

<b>Status of the discipline</b>	compulsory
<b>Number of credits</b>	3
<b>Total amount of hours</b>	90
<b>Lectures</b>	12
<b>Practical lessons</b>	38
<b>Individual work</b>	40
<b>Type of final control</b>	credit

## 3. DESCRIPTION OF THE DISCIPLINE (ABSTRACT)

The academic discipline “**Presentation and Implementation of Scientific Research Results**” is aimed at developing in postgraduate students of the medical profile the competencies necessary for the effective presentation, legal protection, publication, and implementation of the results of their own scientific research in the field of healthcare. The course covers modern approaches to the innovative activity of a researcher, the basics of copyright and patentability of scientific developments, technologies of patent-information search, methods of constructing and delivering scientific presentations, preparation of poster reports and multimedia presentations. Considerable attention is paid to the pathways of transferring innovative technologies into healthcare practice, the rules for preparing scientific publications for national and international journals, as well as the standards for formatting scientific works.

The discipline ensures the postgraduate student’s ability to present the results of their own research in various formats, to conduct competent patent search and intellectual property registration, and to organize the process of implementing the obtained scientific data into scientific and clinical practice.

## 4. POLICY OF THE DISCIPLINE

### 4.1. List of normative documents:

- Regulations on the organization of the educational process – <https://cutt.ly/ArUqCMFh>;
- Instructions for assessing the educational activities of BSMU students in the implementation of the European credit transfer system of the educational process – <https://cutt.ly/yrUqVPvn>;
- Regulations on the procedure for reworking missed and uncredited classes – <https://cutt.ly/jrUqBS36>;
- Regulations on the appeal of the results of the final control of knowledge of higher education – <https://cutt.ly/3rUqMAbV>;
- Codex of Academic Integrity – <https://cutt.ly/FrUq1ljK>;
- Regulations on the prevention of academic plagiarism – <https://cutt.ly/MrUq6QAt>;
- Regulations on the procedure and conditions for students to choose elective courses – <https://cutt.ly/srUwo6Ci>;

- Regulations on the procedure for recognizing learning outcomes achieved through non-formal and/or informal education – <https://cutt.ly/SrUwp1ie>;
- Rules of conduct for students – <https://cutt.ly/ErUq72rZ>;
- Rules of internal labor regulations – <https://cutt.ly/UrUwiACe>.

**4.2. Policy on adherence to the principles of academic integrity of students:**

- independent performance of educational tasks of current and final controls without the use of external sources of information;
- cheating during control of knowledge is prohibited;
- independent performance of individual tasks and correct registration of references to sources of information in case of borrowing of ideas, statements, information.

**4.3. Policy on adherence to the principles and norms of ethics and deontology by students:**

- actions in professional and educational situations from the standpoint of academic integrity and professional ethics and deontology;
- compliance with the university's internal labor regulations and rules of conduct for students, be tolerant, friendly, and thoughtful in communicating with students and staff of departments, healthcare institutions, etc.
- awareness of the importance of examples of human behavior in accordance with the norms of academic integrity and medical ethics.

**4.4. Attendance policy for students:**

- attendance at all training sessions (lectures, practical (seminar) classes, final modular control) is mandatory for the purpose of current and final assessment of knowledge (except for respectable reasons).

**4.5. Deadline policy and completion of missed or uncredited classes by students:**

- reworks of missed classes are held according to the schedule of missed or uncredited classes and consultations.

**5. PRECISIONS AND POST-REQUIREMENTS OF THE DISCIPLINE (INTERDISCIPLINARY RELATIONS)**

List of disciplines, on which the study of academic discipline is based	List of academic disciplines, for which the basis is laid as a result of studying the discipline
Ethics and Methodology of Scientific Research	
Biostatistics	

**6. PURPOSE AND TASKS OF THE DISCIPLINE:**

6.1. The purpose of teaching the academic discipline is to develop in learners of the third (educational-scientific) level of higher education a system of knowledge, skills, and abilities in the field of intellectual property rights protection, conducting patent-information research, preparing scientific publications, and effectively implementing the results of scientific activity into medical practice and the educational-scientific environment.

The academic discipline ensures that PhD candidates acquire the competencies and skills aimed at achieving the global Sustainable Development Goals for 2030, as defined by UN General Assembly Resolution No. 70/1 and Decree of the President of Ukraine No. 722/2019, in particular the implementation of Goal 4 “Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all”, which is achieved through the introduction of research-oriented learning, the formation of universal scientific skills, academic integrity, pedagogical competence, and readiness for lifelong learning, which are embedded in the competence and program outcomes of the discipline.

**6.2. The main objectives of studying this discipline are:**

- mastering the basic concepts and classification of intellectual property objects in biomedical research;
- acquiring knowledge about the criteria of patentability and the procedure for obtaining legal protection in Ukraine and abroad;
- developing skills in conducting patent-information searches using national and international databases;
- gaining proficiency in the principles of academic integrity and copyright in scientific publications;

- acquiring competencies in preparing scientific articles, oral and poster presentations, and multimedia presentations;
- familiarization with modern approaches to technology transfer and commercialization of scientific research results in the field of medicine;
- developing the ability to integrate the results of one's own research into healthcare practice and the international scientific environment.

## **7. COMPETENCIES, THE FORMATION OF WHICH IS CONTRIBUTED BY THE DISCIPLINE:**

### **7.1. Integral competence:**

The ability to generate new ideas, solve complex problems in dentistry and related interdisciplinary fields, apply the methodology of scientific and pedagogical activity, and conduct independent research whose results possess scientific novelty, as well as theoretical and practical significance;

### **7.2. General competencies:**

**GC01.** The ability to solve complex problems based on a systemic scientific worldview and general cultural awareness, while adhering to professional ethics and academic integrity.

**GC02.** Ability to search for, process, and analyze information from various sources.

**GC03.** Ability for abstract thinking, analysis, and synthesis.

**GC04.** Ability to work in an international context.

### **7.3. Professional (special) competencies:**

**SC01.** Ability to conduct original research and achieve scientific results that generate new knowledge in dentistry and related interdisciplinary fields of medicine, suitable for publication in leading international scientific journals.

**SC02.** Ability to initiate, develop, and implement complex innovative projects in dentistry and related interdisciplinary areas.

**SC03.** Ability to present and discuss the results of scientific research and innovative projects in dentistry orally and in writing in the state language and one of the official languages of the European Union, and to publish research results in leading international scientific journals.

**SC05.** Ability to generate new ideas for the development of dental theory and practice, identify problems, formulate and solve research-related issues in healthcare, and evaluate and ensure the quality of conducted research in dentistry.

**SC06.** Ability to apply modern digital technologies, databases, and other electronic resources, as well as specialized software in scientific and educational activities.

**SC07.** Ability to critically analyze, evaluate, and synthesize new and complex ideas in dentistry and related interdisciplinary fields.

**SC08.** Ability for continuous self-development and self-improvement.

**\* Note. GC - general competencies, SC - special competencies.**

## **8. LEARNING OUTCOMES**

**The academic discipline ensures the formation of the following program learning outcomes (LOs):**

**LO 02.** Have a deep understanding of the general principles and methods of health sciences, major trends in their development, and research methodology, and apply them in one's own scientific investigations in dentistry and in teaching practice.

**LO 03.** Be able to freely present and discuss research results and applied problems in dentistry with both specialists and non-specialists in the state and foreign languages, and publish research results in leading international scientific journals.

**LO 07.** Develop and implement scientific and/or innovative medical projects that enable rethinking existing knowledge, creating new comprehensive knowledge and/or professional practice, and addressing significant problems in medicine.

**LO 09.** Plan and conduct research in dentistry and related interdisciplinary fields using modern tools, adhering to professional and academic ethics, bioethics, and Good Clinical Practice (GCP),

and critically analyze both one's own research results and those of others in the context of the full spectrum of contemporary knowledge.

**LO 10.** Develop and study models of processes and systems, and effectively use them to generate new knowledge and/or create innovative products in dentistry and related interdisciplinary areas.

### **8.1. Know:**

- definition of the concept of the innovation process and innovation activity;
- the algorithm for creating an innovation based on the principles of evidence-based medicine;
- modern information and communication technologies for conducting patent-information searches;
- the basics of bibliographic search, leading information resources for information retrieval;
- scientometric databases and their significance;
- the methodology for preparing a scientific article, report, and monograph based on the results of scientific work;
- the list of journals indexed in scientometric databases;
- types and forms of implementation of the results of one's own research (innovations ("Register of Sectoral Innovations"), "List of Scientific (Scientific and Technical) Products Intended for the Implementation of Achievements of Medical Science in Healthcare", information letter, methodological recommendations);
- the ability to assess the competitiveness of an innovation and the patentability of the results of one's own research;
- the definition of the concepts of innovation diffusion, transfer or transmission of innovative technologies;
- forms of transfer, channels of direct and indirect transfer;
- professional vocabulary and terminology in accordance with the specialty and field of training.

### **8.2. Be able to:**

- to develop communication within the professional environment and the public sphere for the dissemination of scientific facts in the social sector;
- to prepare the informational support for effective and other forms of implementation;
- to carry out informational monitoring of the technology's readiness for transfer;
- to promote technological, social, and cultural progress in academic and professional contexts;
- to conduct patent-information searches on the chosen dissertation topic at various stages of its completion (planning, writing, and finalization);
- to present the results of scientific research in accordance with national and international standards;
- to implement research results by creating, on the basis of scientific studies, new lecture courses and updating existing lecture courses and specific topics of practical classes;
- to incorporate the results of scientific research into monographs, textbooks, manuals, collections of problems, and similar academic resources.

### **8.3. Demonstrate:**

- the ability to integrate knowledge of patent science, intellectual property, and innovation activity into one's own scientific practice;
- skills in scientific communication in national and international contexts;
- adherence to the principles of academic integrity in research and publication activities;
- autonomy and responsibility in decision-making regarding the protection and implementation of research results;
- readiness for interdisciplinary cooperation with colleagues and business partners;
- critical thinking and the ability to evaluate new ideas in the field of healthcare;
- the ability for continuous professional and scientific self-improvement.

## **8. INFORMATIONAL SCOPE OF THE DISCIPLINE**

### *Description of each module of the discipline:*

#### **9.1. Specific learning objectives of the module (content module).**

**Module 1. Presentation and Implementation of the Results of One's Own Scientific Research**  
**Content Module 1. Theoretical Foundations of Innovative and Research Activities.**  
**Intellectual Property and Scientific Information Support**

**Specific objectives:**

- to form in learners a holistic understanding of innovative activity and the innovation process in science, their structure, stages, and life cycle in the context of scientific research;
- to ensure understanding of the essence of innovations in scientific activity, the mechanisms of their classification and diffusion in the scientific environment;
- to develop knowledge of the intellectual property system, objects and subjects of intellectual property rights, as well as the principles of legal protection of research results;
- to acquire the ability to analyze the legal protection and competitiveness of the results of one's own scientific research and to justify the choice of appropriate forms of their legal protection;
- to develop skills in using scientific information resources and scientometric databases for searching, analyzing, and systematizing scientific information relevant to the research topic.

**Content Module 2. Presentation of Scientific Research Results and Public Scientific Communication Using Digital Technologies**

**Specific objectives:**

- to develop the ability to select appropriate forms and methods for presenting scientific research results depending on the target audience and the format of scientific communication;
- to ensure mastery of the principles of structuring and logical organization of presentations of scientific results;
- to acquire skills in preparing visual forms of presenting research results, in particular poster presentations;
- to develop the ability to create multimedia presentations using modern digital tools and technologies;
- to enhance competencies in the field of public scientific communication and participation in scientific forums as means of disseminating research results.

**Content Module 3. Scientific Publication, Academic Integrity, and Documentary Support for the Implementation of Research Results**

**Specific objectives:**

- to develop learners' understanding of ethical standards of scientific activity, the principles of academic integrity, and mechanisms for preventing plagiarism;
- to ensure understanding of the role of scientific publication as a key form of presenting research results;
- to acquire the ability to prepare scientific articles in accordance with the requirements of professional journals, Category "B" journals, and international journals indexed in Scopus and Web of Science;
- to develop knowledge of the main scientometric indicators and their use in evaluating the results of scientific activity;
- to develop skills in preparing documentary support for the implementation of research results in the field of healthcare.

**Content Module 4. Technology Transfer, Scientific Project Management, and Research Funding**

**Specific objectives:**

- to form a systemic understanding of the processes of innovation diffusion and technology transfer in the fields of science, education, and practical medicine;
- to ensure understanding of the mechanisms of commercialization of research results, the creation of start-ups, and interaction with industrial partners;
- to acquire knowledge and skills in scientific project management, including planning, resource allocation, and evaluation of results;
- to develop the ability to navigate research funding systems and grant opportunities;

- to develop skills in preparing and submitting grant applications in accordance with the requirements of national and international funding bodies.

## **9.2. Thematic structure of the module (content modules).**

### **MODULE 1. Presentation and Implementation of the Results of One's Own Scientific Research**

#### **Content Module 1. Theoretical Foundations of Innovative and Research Activities.**

##### **Intellectual Property and Scientific Information Support**

**Topic 1.** Innovative activity and the innovation process in science: essence, functions, objectives, stages of implementation, and the life cycle of innovations.

**Topic 2.** Innovations in scientific research: concepts, classification, typology, and specific features of innovation diffusion in the scientific environment.

**Topic 3.** Intellectual property in scientific activity: objects, subjects, and the system of legal protection of research results.

**Topic 4.** Copyright in scientific activity: principles of protection, stages of registration, and use of the results of intellectual work.

**Topic 5.** Legal protection and competitiveness of the results of one's own scientific research: patenting and alternative forms of protection.

**Topic 6.** Scientific information resources and scientometric databases in research activity: opportunities for searching, analyzing, and systematizing scientific information.

#### **Content Module 2. Presentation of Scientific Research Results and Public Scientific Communication Using Digital Technologies**

**Topic 7.** Forms and methods of presenting scientific research results. Presentation as a type of public scientific speech.

**Topic 8.** Structure of the presentation of scientific results: logic of construction, components, and principles of selection and presentation of scientific material.

**Topic 9.** Visual forms of presenting research results: poster presentations, requirements for design and presentation.

**Topic 10.** Multimedia presentation of scientific research results: objectives, structure, rules for slide design, and the use of modern digital tools.

**Topic 11.** Participation in scientific forums and public scientific communication: conferences, symposia, seminars, and scientific social networks.

#### **Content Module 3. Scientific Publication, Academic Integrity, and Documentary Support for the Implementation of Research Results**

**Topic 12.** Ethical standards of scientific activity: academic integrity, research ethics, and prevention of plagiarism.

**Topic 13.** Publication as a form of presentation of scientific research results: types of publications, general requirements, and editorial policies of scientific journals.

**Topic 14.** Preparation of scientific articles for professional journals, Category "B" journals, and journals indexed in Scopus and Web of Science.

**Topic 15.** Scientometric indicators and metrics for evaluating the results of scientific activity: citation rates, impact factor, h-index, and alternative metrics.

**Topic 16.** Documentary support of the innovation process and implementation of research results in the field of healthcare: implementation acts, information letters, and methodological guidelines.

#### **Content Module 4. Technology Transfer, Scientific Project Management, and Research Funding**

**Topic 17.** Diffusion of innovations and technology transfer: forms, levels, and mechanisms for implementing scientific research results in practical medicine and the educational process.

**Topic 18.** Innovative entrepreneurship: commercialization of research results, creation of start-ups, and cooperation with industry.

**Topic 19.** Management of scientific projects and funding of scientific research: planning, resources, evaluation of results, grant opportunities, and preparation of applications.

## 9. STRUCTURE OF THE DISCIPLINE

Names of content modules and topics	Amount of hours				
	Total	including			
		Classroom		Independent students' work	Individual work
Lectures	Practical lessons				
1	2	3	4	5	6
<b>MODULE 1. PRESENTATION AND IMPLEMENTATION OF THE RESULTS OF ONE'S OWN SCIENTIFIC RESEARCH</b>					
<b>Content Module 1. Theoretical Foundations of a Researcher's Innovation Activity. Intellectual Property and Scientific-Information Resources</b>					
<b>Topic 1.</b> Innovative activity and the innovation process in science: essence, functions, objectives, stages of implementation, and the life cycle of innovations.	5	1	2	2	
<b>Topic 2.</b> Innovations in scientific research: concepts, classification, typology, and specific features of innovation diffusion in the scientific environment.	5	1	2	2	
<b>Topic 3.</b> Intellectual property in scientific activity: objects, subjects, and the system of legal protection of research results.	5	1	2	2	
<b>Topic 4.</b> Copyright in scientific activity: principles of protection, stages of registration, and use of the results of intellectual work.	4,5	0,5	2	2	
<b>Topic 5.</b> Legal protection and competitiveness of the results of one's own scientific research: patenting and alternative forms of protection.	3,5	0,5	2	1	
<b>Topic 6.</b> Scientific information resources and scientometric databases in research activity: opportunities for searching, analyzing, and systematizing scientific information.	4	2	2	1	
<b>Total on the content module 1</b>	<b>27</b>	<b>6</b>	<b>12</b>	<b>10</b>	
<b>Content Module 2. Presentation of Scientific Research Results and Public Scientific Communication Using Digital Technologies</b>					
<b>Topic 7.</b> Forms and methods of presenting scientific research results. Presentation as a type of public scientific speech.	4	–	2	2	
<b>Topic 8.</b> Structure of the presentation of scientific results: logic of construction, components, and principles of selection and presentation of scientific material.	4,5	0,5	2	2	
<b>Topic 9.</b> Visual forms of presenting research results: poster presentations, requirements for design and presentation.	4,5	0,5	2	2	
<b>Topic 10.</b> Multimedia presentation of scientific research results: objectives,	4,5	0,5	2	2	

structure, rules for slide design, and the use of modern digital tools.					
<b>Topic 11.</b> Participation in scientific forums and public scientific communication: conferences, symposia, seminars, and scientific social networks.	4,5	0,5	2	2	
<b>Total on the content module 2</b>	<b>22</b>	<b>2</b>	<b>10</b>	<b>10</b>	
<b>Content Module 3. Scientific Publication, Academic Integrity, and Documentary Support for the Implementation of Research Results</b>					
<b>Topic 12.</b> Ethical standards of scientific activity: academic integrity, research ethics, and prevention of plagiarism.	4,5	0,5	2	2	
<b>Topic 13.</b> Publication as a form of presentation of scientific research results: types of publications, general requirements, and editorial policies of scientific journals.	4,5	0,5	2	2	
<b>Topic 14.</b> Preparation of scientific articles for professional journals, Category “B” journals, and journals indexed in Scopus and Web of Science.	4,5	0,5	2	2	
<b>Topic 15.</b> Scientometric indicators and metrics for evaluating the results of scientific activity: citation rates, impact factor, h-index, and alternative metrics.	4	–	2	2	
<b>Topic 16.</b> Documentary support of the innovation process and implementation of research results in the field of healthcare: implementation acts, information letters, and methodological guidelines.	5,5	0,5	2	3	
<b>Total on the content module 3</b>	<b>23</b>	<b>2</b>	<b>10</b>	<b>11</b>	
<b>Content Module 4. Technology Transfer, Scientific Project Management, and Research Funding</b>					
<b>Topic 17.</b> Diffusion of innovations and technology transfer: forms, levels, and mechanisms for implementing scientific research results in practical medicine and the educational process.	5	1	2	2	
<b>Topic 18.</b> Innovative entrepreneurship: commercialization of research results, creation of start-ups, and cooperation with industry.	4,5	0,5	2	2	
<b>Topic 19.</b> Management of scientific projects and funding of scientific research: planning, resources, evaluation of results, grant opportunities, and preparation of applications.	4,5	0,5	2	2	
<b>Total on the content module 4</b>	<b>12</b>	<b>2</b>	<b>6</b>	<b>6</b>	
<b>Individual work (if present)</b>					
<b>TOTAL HOURS</b>	<b>90</b>	<b>12</b>	<b>38</b>	<b>40</b>	

## 10. THEMATIC PLAN OF LECTURES

№	Name of topic	Amount of hours
1	Innovative activity and the innovation process in science: essence, stages,	2

	innovations, and mechanisms of innovation diffusion	
2	Intellectual property in scientific activity: copyright, patenting, and legal protection of research results	2
3	Scientific information resources and scientometric databases in research activity	2
4	Forms of presentation of scientific research results and public scientific communication	2
5	Scientific publication, academic integrity, and documentary support for the implementation of research results	2
6	Technology transfer, scientific project management, and funding of scientific research as instruments for the practical implementation of scientific research results	2
<b>Total</b>		<b>12</b>

## 11. THEMATIC PLAN OF PRACTICAL CLASSES

No	Name of topic	Amount of hours
1	Innovative activity and the innovation process in science: essence, functions, objectives, stages of implementation, and the life cycle of innovations.	2
2	Innovations in scientific research: concepts, classification, typology, and specific features of innovation diffusion in the scientific environment.	2
3	Intellectual property in scientific activity: objects, subjects, and the system of legal protection of research results.	2
4	Copyright in scientific activity: principles of protection, stages of registration, and use of the results of intellectual work.	2
5	Legal protection and competitiveness of the results of one's own scientific research: patenting and alternative forms of protection.	2
6	Scientific information resources and scientometric databases in research activity: opportunities for searching, analyzing, and systematizing scientific information.	2
7	Forms and methods of presenting scientific research results. Presentation as a type of public scientific speech.	2
8	Structure of the presentation of scientific results: logic of construction, components, and principles of selection and presentation of scientific material.	2
9	Visual forms of presenting research results: poster presentations, requirements for design and presentation.	2
10	Multimedia presentation of scientific research results: objectives, structure, rules for slide design, and the use of modern digital tools.	2
11	Participation in scientific forums and public scientific communication: conferences, symposia, seminars, and scientific social networks.	2
12	Ethical standards of scientific activity: academic integrity, research ethics, and prevention of plagiarism.	2
13	Publication as a form of presentation of scientific research results: types of publications, general requirements, and editorial policies of scientific journals.	2
14	Preparation of scientific articles for professional journals, Category "B" journals, and journals indexed in Scopus and Web of Science.	2
15	Scientometric indicators and metrics for evaluating the results of scientific activity: citation rates, impact factor, h-index, and alternative metrics.	2
16	Documentary support of the innovation process and implementation of research results in the field of healthcare: implementation acts, information letters, and methodological guidelines.	2
17	Diffusion of innovations and technology transfer: forms, levels, and mechanisms for implementing scientific research results in practical medicine and the educational process.	2
18	Innovative entrepreneurship: commercialization of research results, creation of start-	2

	ups, and cooperation with industry.	
19	Management of scientific projects and funding of scientific research: planning, resources, evaluation of results, grant opportunities, and preparation of applications.	2
	Total	38

## 12. THEMATIC PLAN OF INDIVIDUAL WORK

№	Назва теми	Amount of hours
1	Pre-class preparation for practical classes (theoretical preparation and acquisition of practical skills) according to the plan of practical classes of the academic discipline “Presentation and Implementation of Scientific Research Results”	40
<b>TOTAL</b>		40

## 13. LIST OF INDIVIDUAL TASKS

Oral presentation on a problem-oriented topic related to the student’s own dissertation research (including the results of the dissertation research) (up to 20 minutes).

## 14. TASKS FOR INDEPENDENT WORK

Pre-class preparation for practical classes (theoretical preparation and acquisition of practical skills) according to the plan of practical classes of the academic discipline “Presentation and Implementation of Research Results”.

## 15. METHODS AND FORMS OF CONTROL (including criteria for assessing learning outcomes)

### 16.1. Form, procedure, methodology, and criteria for assessing current learning activities.

**Initial assessment** of knowledge is conducted orally at the beginning of the study of content modules in order to determine the general level of knowledge.

**Ongoing assessment** is carried out at each practical class in accordance with the specific objectives of the topic. Assessment of the knowledge, skills, and practical competencies acquired by learners is conducted through testing, oral questioning, and evaluation of the completion of individual assignments within the relevant topics of practical classes.

Assessment of learners’ ongoing academic performance and the final assessment of the discipline “Presentation and Implementation of Research Results” as a whole is conducted in accordance with the Regulations on the Organization of the Educational Process at Bukovinian State Medical University.

Ongoing assessment of learners for the respective topics is conducted using the traditional four-grade scale (“excellent”, “good”, “satisfactory”, “unsatisfactory”), followed by conversion into the ECTS grading scale in accordance with the Regulations on the Organization of the Educational Process at Bukovinian State Medical University. All types of work предусмотрены by the methodological guidelines for studying the topic are taken into account. Each learner must obtain a grade for each topic.

### **Assessment criteria for the current academic performance of learners in Module 1 “Presentation and Implementation of the Results of One’s Own Scientific Research”:**

**A grade of “excellent”** is awarded when the learner fully knows the content of the session and lecture material, illustrating answers with various examples; provides complete, accurate, and clear answers without leading questions; presents the material without errors or inaccuracies; freely solves test tasks and performs practical assignments of different levels of complexity.

**A grade of “good”** is awarded when the learner knows the session content and demonstrates good understanding; answers questions correctly, consistently, and systematically, although the answers may not be entirely comprehensive; however, the learner responds to additional questions without mistakes; solves all test tasks and completes practical assignments, experiencing difficulty only in the most challenging cases.

**A grade of “satisfactory”** is given when the learner knows the entire content of the session and demonstrates an adequate level of understanding. The learner is able to solve modified (simplified) tasks with the help of guiding questions; completes tasks and practical skills but experiences difficulties even in simple cases; is unable to present the answer systematically on their own but answers direct questions correctly.

**A grade of “unsatisfactory”** is awarded when the learner’s knowledge and skills do not meet the requirements for a “satisfactory” grade.

### **16.2. Form, procedure, methodology, and criteria for assessing individual independent work.**

Assessment of learners’ independent work, which is предусмотрена within a topic alongside classroom activities, is carried out during the ongoing assessment of the topic at the corresponding classroom session.

Points for individual assignments are awarded to learners only upon their successful completion. The number of points awarded for the completion of individual assignments depends on the level of performance:

- 10 points (high level) – the presentation fully corresponds to the topic of the learner’s own dissertation research, demonstrates a deep understanding of theoretical aspects and the current state of the problem; the argumentation is clear, logical, and well-founded; the presentation incorporates the results of the learner’s own scientific research with correct interpretation; the structure of the presentation is clear (introduction, justification of relevance, aim, materials and methods, results, their analysis, conclusions); up-to-date sources are used; the presentation is delivered confidently in academic language; the time limit is observed; answers to questions are accurate, well-argued, and demonstrate a high level of scientific competence;
- 8 points (sufficient level) – the presentation generally corresponds to the problem area and reflects the main aspects of the dissertation research; a correct analysis of the literature and the learner’s own results is provided; however, the argumentation may be less in-depth or partially fragmented; the structure is mostly logical, but minor disruptions in the flow or gaps between sections are present; the language of the presentation is predominantly academic, with occasional inaccuracies or excessive detail; the time limit is observed; however, answers to questions may sometimes be incomplete or insufficiently substantiated;
- 6 points (low level) – the presentation partially corresponds to the topic or is only loosely related to the dissertation research; the material is presented superficially; analysis of the literature and the learner’s own results is insufficient or fragmented; the structure is unclear, with certain elements (relevance, aim, results, conclusions) presented indistinctly or absent; outdated data or sources are used without critical analysis; the time limit is not observed; answers to questions are unclear, incomplete, or demonstrate partial misunderstanding of the material.

The points obtained for the completion of individual independent work are added to the total number of points accumulated by the learner during ongoing academic activities in class.

### **16.3. Conditions for admission to the final assessment.**

Learners are admitted to the final assessment if they have attended all classroom academic activities (lectures and practical sessions) specified in the academic calendar, completed all types of work required by the syllabus of the academic discipline, and obtained a number of points for current academic performance that is not lower than the minimum required.

If a learner has not completed all types of work required by the curriculum for a valid reason, adjustments are made to the individual study plan, and the learner is allowed to make up the academic backlog within a specified deadline..

### **16.4. Form, procedure, methodology, and criteria for assessment during the final assessment.**

The form of the final assessment for the discipline “Presentation and Implementation of Research Results” is a *pass-fail assessment (credit)*, which is conducted upon completion of all

module topics by evaluating the learner’s mastery of the academic material based on the results of the tasks completed during practical sessions in accordance with the curriculum.

The number of practical session topics in the discipline “Presentation and Implementation of Research Results” is determined in the working academic programme and does not include a separate academic session dedicated to administering the credit.

### 17. LIST OF TASKS TO THE FINAL CONTROL

The final modular assessment is not stipulated by the curriculum.

### 18. SCORE CALCULATION AND DISTRIBUTION SCHEME

The module grade is determined as the sum of the scores for current academic performance (in points), awarded at each session for the respective topic, and points for completing individual assignments.

**The maximum number of points** a learner can earn during the study of the module is 200 points, including:

– for current academic performance – 200 points.

**The minimum number of points** a learner must earn during the study of the module is 120 points, including:

– for current academic performance – 120 points.

Current assessment of learners in the corresponding topics is carried out using the traditional 4-point grading scale (“excellent,” “good,” “satisfactory,” “unsatisfactory”) with subsequent conversion into a multi-point scale.

Conversion of points into traditional grades “5,” “4,” “3,” “2” for mastering a module topic

Number of module number of study hours / number of credits ECTS	Number of content modules, their numbers	Number of practical classes	Conversion into point of the traditional scale				Scores for individual task	Minimum score of points *
			Traditional scale					
			"5"	"4"	"3"	"2"		
Module 1 90/3,0	4 (№№ 1-4)	19	10	8	6	0	6, 8, 10	120

**The final score for the current activity** is recognized as the arithmetic sum of points for each lesson and for individual work.

**The maximum number of points** that a learner can score for the current activity during the study of the module is **200 points**. It is calculated by multiplying the number of points corresponding to the grade "excellent" (10 points) by the number of topics in the module (last topic - final module control is not taken into account) (10 points × 19 classes = 190 points) with the addition of points for an individual students’ task (maximum – 10 points) and is equal to **200 points**.

**The minimum number of points** a learner must earn for current academic performance during the study of the module is calculated by multiplying the number of points corresponding to a grade of “3” (6 points) by the number of topics in the module (6 points × 19 classes = 114 points) with the addition of points for an individual students’ task (minimum – 6 points) and is equal to **120 points**.

#### Conversion of the number of points from the discipline into grades according to ECTS and 4-point (traditional) scales

The number of points from the discipline "Presentation and Implementation of Research Results", which is awarded to students, is converted to the ECTS scale.

**Conversion of points from the discipline "Presentation and Implementation of Research Results" to the ECTS scale:**

<b>Evaluation according to the 200-point scale(balls)</b>	<b>Evaluation according to the traditional 4-point scale</b>
From 180 up to 200 <b>scores</b>	"5"
From 150 up to 179 <b>balls scores</b>	"4"
From 149 up to minimal number of <b>scores that a student must collect</b>	"3"
Less than the minimum number of points that a student must collect	"2"

The ECTS grade is not converted into the traditional four-point scale, as the ECTS scale and the four-point grading scale are independent.

## **19. RECOMMENDED LITERATURE**

### 19.1 Basic

1. Brownson RC, Colditz GA, Proctor EK, eds. Dissemination and implementation research in health: translating science to practice. Oxford University Press, 2012. Available from:

[https://www.researchgate.net/publication/263808945\\_Dissemination\\_and\\_Implementation\\_Research\\_in\\_Health\\_Translating\\_Science\\_to\\_Practice#fullTextFileContent](https://www.researchgate.net/publication/263808945_Dissemination_and_Implementation_Research_in_Health_Translating_Science_to_Practice#fullTextFileContent)

### 19.2. Auxillary

1. Peters, D. H., Adam, T., Alonge, O., Agyepong, I. A., & Tran, N. (2013). Implementation research: what it is and how to do it. *BMJ*, 347:f6753. Retrieved from [https://www.researchgate.net/publication/258825119\\_Implementation\\_research\\_What\\_it\\_is\\_and\\_how\\_to\\_do\\_it](https://www.researchgate.net/publication/258825119_Implementation_research_What_it_is_and_how_to_do_it)

2. Peters, D. H., Tran, N. T., & Adam, T. (2013). Implementation Research in Health: A Practical Guide. World Health Organization. Retrieved from <https://iris.who.int/items/58f7e6ba-340a-4606-9892-431bc119e0c0>

3. Villalobos Dintrans P, Bossert TJ, Sherry J, Kruk ME. A synthesis of implementation science frameworks and application to global health gaps. *Glob Health Res Policy*. 2019 Aug 27;4:25. doi: 10.1186/s41256-019-0115-1. PMID: 31485483; PMCID: PMC6712702.

### 19.3 Information resources

1. State System of Legal Protection of Intellectual Property (Ukraine). Available at: <https://ukrpatent.org/uk>
2. European Patent Office. Available at: <https://www.epo.org>
3. Ukrainian National Office for Intellectual Property and Innovations. Available at: <https://nipo.gov.ua/>

## **20. COMPILERS OF THE STUDENT GUIDE (SYLLABUS)**

Todoriko Liliia Dmytrivna – Doctor of Medical Sciences, Professor, Chief of the Department of Phthiology and Pulmonology.