

**Federal State Autonomous Educational Institution of Higher Education "Moscow
Institute of Physics and Technology
(National Research University)"**

APPROVED
Vice Rector for Academic Affairs

A.A. Voronov

Work program of the course (training module)

course: Search and Verification of Information for Research and its Expertise/Поиск и
верификация научной информации

major: Biotechnology

specialization: Medical Biotechnology/Медицинская биотехнология
Phystech School of Biological and Medical Physics
Educational and scientific center for the humanities and social sciences

term: 1

qualification: Master

Semester, form of interim assessment: 1 (fall) - Exam

Academic hours: 30 AH in total, including:

lectures: 30 AH.

seminars: 0 AH.

laboratory practical: 0 AH.

Independent work: 30 AH.

Exam preparation: 30 AH.

In total: 90 AH, credits in total: 2

Number of course papers, tasks: 2

Author of the program: G.R. Konson, doctor of art history, full professor, professor

The program was discussed at the Educational and scientific center for the humanities and social sciences 04.04.2025

Annotation

The course examines technologies for searching for scientific information and criteria for its selection in the context of the formation of reputational mechanisms and academic management skills, with a focus on improving the set of skills and abilities necessary for the formation of professional criteria for expert evaluation of research.

Significant attention is paid to violations of research ethics: plagiarism (including translated), data falsification, multiple publication, mysterious authorship, illegal increase in citation (self- and cross), false/attributed authorship, the influence of non-scientific factors on author's ideas (racial, national, gender, religious-confessional and geopolitical). Tools for searching texts and checking their quality, their advantages and disadvantages in the context of complementarity and replaceability are studied: grant funding, Dissernet, Jeffrey Beall's list, Scimago, WoS subject areas, QS, THE, ARWU rankings, Springer, Wiley, Taylor & Francis, Elsevier, Frontiers, ProQuest, Jstor, Academia.edu, ResearchGate, Semantic Scholar, Google Books, PLOS One, SAGE publishing houses and journals of top-50 universities and leading professional communities, stop lists of universities and other organizations, as well as independent researchers, www.antiplagiat.ru, www.plagiarismcheck.org, www.duplichecker.com, vroniplag.de/, www.citationmachine.net, etc.

Based on the above skills, the structure of expertise is considered in relation to its hierarchically subordinate components: the purpose of the expertise, the selection of data on the topic of the object and subject of assessment and their verification, assessment of the research potential of the case: its scientific novelty and the prospects of possible results, the specialization of the project, methods of criteria for existing responses, etc.

Expert positions are studied, such as: author of the publication, reviewer, scientific supervisor/consultant of the dissertation/publishing project, official opponent on the dissertation, compiler of the review of the leading organization on the dissertation, author of the review on the abstract of the dissertation, expert on grant projects of Russian/foreign/international profiles, etc.

Examples of supported/rejected applications of various profiles are studied, and the quality of expertise for specific projects is analyzed.

In general, the course allows students to develop the basics of expert thinking in the context of the systematic application of the knowledge gained in subsequent academic activities.

This approach allows you to panoramize the subject slice, creating a systematic view of the problem field.

Target audience: listeners interested in the problems of searching for scientific information and verifying its selection, as well as issues of academic management and the construction of scientific reputation in the context of criteria for expert evaluation of research.

The educational program has a modular structure, characterized by a hierarchically subordinate deployment of material.

1. Study objective

Purpose of the course

Development of students' skills in searching for scientific information and the formation of criteria for its selection, understanding the mechanisms of formation of scientific reputation and the development of academic management skills.

Improving the participants' basics of expert thinking in the context of the systematic application of the knowledge gained in subsequent academic activities, improving the set of skills and abilities necessary for the formation of professional criteria for expert evaluation of scientific research.

Tasks of the course

- study of technologies, tools for searching for scientific information;
- studying ways to check the quality of information selection tools and criteria for its selection;
- study of the mechanisms of formation of scientific reputation and rules of scientific ethics;
- acquaintance with international tools for the formation of scientific reputation and the exclusion of violations of research ethics;
- studying the features of building an academic career and research reputation in Russia and abroad;
- acquaintance with interdisciplinary and specialized educational projects;
- studying the features of academic text and its public presentation;
- acquaintance with the rules for the design of academic text and reference and reference systems;

- formation of a set of skills and abilities necessary for the criteria of expert evaluation of scientific research;
- studying the structure of expertise in relation to its hierarchically subordinate components;
- acquaintance with expert positions;
- analysis of examples of supported/rejected applications of various profiles and quality of expertise.

2. List of the planned results of the course (training module), correlated with the planned results of the mastering the educational program

Mastering the discipline is aimed at the formation of the following competencies:

Code and the name of the competence	Competency indicators
UC-1 Use a systematic approach to critically analyze a problem and develop an action plan	UC-1.1 Systematically analyze the problem situation, identify its components and the relations between them
	UC-1.2 Search for solutions by using available sources
	UC-1.3 Develop a step-by-step strategy for achieving a goal, foresee the result of each step, evaluate the overall impact on the planned activity and its participants
UC-5 Analyze and consider cultural diversity in intercultural interactions	UC-5.1 Identify specific philosophical and scientific traditions in major world cultures
	UC-5.2 Define the theoretical and practical significance of cultural and linguistic factors within various interrelated philosophical and scientific traditions
UC-6 Determine priorities and ways to improve performance through self-assessment	YK-6.1 achieve personal growth and professional development, determine priorities and ways to improve performance
	UC-6.2 Evaluate performance results in correlation with the set objectives and applied methods

3. List of the planned results of the course (training module)

As a result of studying the course the student should:

know:

- tools for searching for scientific texts and criteria for checking their quality;
- features of the principles of criteria for the selection of scientific information with a focus on the analysis of the background of actors in academic activity;
- fundamentals of scientific research ethics;
- basic international tools for checking the quality of scientific texts and research;
- the main vectors of searching for scientific information and ways to optimize it;
- the basics of building an academic text and its public presentation;
- features of preparing an academic text and the basics of presenting it to the scientific community;
- the basics of building a public representation of the image of a researcher in various academic traditions in the context of the conditions for the formation of science management skills;
- basic approaches to the methodology of expertise and its qualitatization;
- the structure of expertise in relation to its hierarchically subordinate components;
- basic expert positions, such as: author of the publication, reviewer, scientific supervisor/consultant of the dissertation/publishing project, official opponent on the dissertation, compiler of the review of the leading organization on the dissertation, author of the review on the abstract of the dissertation, expert on grant projects of Russian/foreign/international profiles, etc;
- methods of criteria of assessments;
- ways for assessing the novelty and prospects of research results.

be able to:

- justify the assessment of the quality of the tool for searching for scientific texts and criteria for checking their quality;
- identify the main signs of violation of scientific research ethics (plagiarism, data falsification, multiple publication, mysterious authorship, illegal increase in citation, false/attribution authorship, the influence of non-scientific factors on author's ideas);
- use the main vectors of searching for scientific information and ways to optimize it;
- work with modern tools for the formation of scientific research reputation;
- build a public representation of the image of a researcher in various academic traditions in the context of the conditions for the formation of science management skills;
- be able to use the knowledge gained to prepare an academic text and present it to the scientific community;
- formulate the purpose of the expertise;
- criteria for assessing the quality of expertise;
- analyze the quality of data on the topic of the object and subject of expert evaluation;
- assess the novelty and prospects of possible research results;
- clarify the degree of specialization of the project;
- formulate methods for criteria of responses.

master:

- skills in searching for scientific research information and using criteria for its selection in the context of the formation of reputational mechanisms and academic management skills;
- basic skills in recognizing violations of scientific research ethics;- the basics of academic text and its public presentation
- a set of skills and abilities necessary for the formation of professional criteria for expert evaluation of scientific research;
- basic skills of expert thinking in the context of the systemic application of acquired knowledge in subsequent academic activities.

4. Content of the course (training module), structured by topics (sections), indicating the number of allocated academic hours and types of training sessions

4.1. The sections of the course (training module) and the complexity of the types of training sessions

№	Topic (section) of the course	Types of training sessions, including independent work			
		Lectures	Seminars	Laboratory practical	Independent work
1	Module 1. Building an academic career and research reputation: Russian realities vs foreign experience	4			2
2	Module 2. Criteria for selecting and verifying sources	4			4
3	Module 3. Information retrieval for academic research. Sites (or/and plugins)	4			4
4	Module 4. Academic text and its public representation	3			4
5	Module 5. Expertise as a tool: the structure of the phenomenon	4			4

6	Module 6. Types of experts	4			4
7	Module 7. Methodology of expertise and its qualification	4			4
8	Module 8. Expert's personality vs employer: quality control of expertise and control over the activities of its author	3			4
AH in total		30			30
Exam preparation		30 AH.			
Total complexity		90 AH., credits in total 2			

4.2. Content of the course (training module), structured by topics (sections)

Semester: 1 (Fall)

1. Module 1. Building an academic career and research reputation: Russian realities vs foreign experience

1.1. Lecture: Building an academic career and research reputation: Russian realities vs foreign experience.

The current state of scientific knowledge. Joker cases [definition by Grigory Konson] (James Lindsay, Helen Pluckrose, Peter Bogosian, as well as others) in the context of the prospects for the development of independent research thought and the influence on it of the current conjuncture (Priyambda Gopal, Christine Stewart, Susan Sontag, Robin DiAngelo, Eric Dyson, etc.).

Academic environment in Russia and abroad. Postdoc Institute. Publication activity, collaboration, grant funding, ratings.

Practice: Viewing thematic videos and discussion on the main problematic vectors touched upon in the lesson.

2. Module 2. Criteria for selecting and verifying sources

2.1. Criteria for selecting and verifying sources: beginning. Predators and hunters.

Lecture: Predatory journals and publishers, toxic authors. Violations of academic ethics: plagiarism (by levels – copy-paste, plagiarism of ideas, translation plagiarism, etc.), scientific fraud, multiple publications, publications with mysterious authorship.

False (attributed) authorship + administrative resource.

Incorrect citation. Self- and cross-citation. Distortion of facts/authorship, broken links, etc.

Unreliable reporting on grants/contracts/state assignments/agreements/contracts, etc. = misuse of grant funds.

Jeffrey Beall's list, <https://www.antiplagiat.ru>, www.plagiarismcheck.org, www.duplichecker.com, <https://vroniplag.de/>, Dissertnet and Dissertopedia (journals, universities).

Quartiles and percentile. White and black lists of libraries (examples: NEB, as well as RGB - in the future) and universities (MIPT, HSE, Moscow State University named after M.V. Lomonosov, etc.).

Practice: Watching thematic videos and discussion on the main problematic vectors touched upon in the lesson.

2.2. Criteria for selecting and verifying sources: continuation. Judges and hybrids

Lecture: Editorial practices in Russia and abroad. Retraction of articles. Voluntary (example of Frances Arnold), forced (case of Ilya Medvedev). Implementation of batch retraction elements (term by Grigory Konson) into the work of Clarivate and Elsevier.

RAS, Higher Attestation Commission of the Ministry of Science and Higher Education of the Russian Federation, universities.

Practice: Watching thematic videos and discussion on the main problematic vectors touched upon in the lesson.

2.3. Criteria for selecting sources and their verification: end. Tools.

Lecture: Sites of academic and quasi-academic periodicals.

WoS vs Scopus (subject ratings and ranking), headliners of academic periodicals (frequency of publications and their weight).

Integration of links to facts and ideas presented on classical research resources, scientific and educational portals, as well as non-academic sites.

Quality and depth of links in the context of problematizing the main object of research.

Identification/formulation of research trends.

Practice: Watching thematic videos and discussion on the main problematic vectors touched upon in the lesson.

3. Module 3. Information retrieval for academic research. Sites (or/and plugins)

3.1. Information retrieval for academic research. Sites (or/and plugins): start.

Lecture: HathiTrust, Unpaywall, Open Access Button, Master Journal List, groups of journals of universities of the Russell Group (Oxford Journals Online, Cambridge Journals Online, etc.) and the Ivy League (Harvard Journals / Harvard Library, etc.).

Leading international academic periodicals: Nature, Science, etc.

PLOS One, SAGE, JSTOR, TEI.

Aggregators and sites: Academia.edu, Google Scholar, Google Books, Frontiers, arXiv.org, ERIC, Psycjournals, dissertation sections of university websites in Russia and abroad.

Libraries, library systems and digital business cards of researchers: Library of Congress, RGB, eLibrary, CyberLeninka, Istina (Moscow State University, etc.), Gale, ResearcherID, ORCID.

Practice: Watching thematic videos and discussion on the main problematic vectors touched upon in the lesson.

3.2. Information retrieval for academic research. Sites (or/and plugins): continuation.

Lecture: Sites of publishing groups – Springer Link, Wiley Online Library, Taylor & Francis, etc.

University publishers – top 20 QS, THE, ARWU.

Websites of state and private archives, specialized foreign aggregators: Factiva, etc., domestic: EastView, Public.ru, etc.

Search engines with questionable legal status (Sci-Hub); specialized portals / groups (Arzamas, Postnauka, Vsenauka, educational materials of the RGB, etc.).

Bloggers/vloggers/hosts of thematic programs (Artem Oganov, etc.) on television channels and in social networks.

Practice: Watching thematic videos and discussion on the main problematic vectors touched upon in the lesson.

4. Module 4. Academic text and its public representation

4.1. Lecture: Structure and style: Russia, Europe, USA, Japan, China. Hybrid cases.

Reference and citation systems.

Practice: Watching thematic videos and discussion on the main problematic vectors touched upon in the lesson.

5. Module 5. Expertise as a tool: the structure of the phenomenon

5.1. Lecture: The concept of expertise and its purpose.

Selection of data on the topic of the object and subject of assessment. Their verification.

Practice: Watching thematic videos and discussion on the main problematic vectors touched upon in the lesson.

5.2. Lecture: Analysis of the research potential of the case.

Scientific novelty and prospects of possible results. Specialization of the project. Methods of criteria for existing responses, etc.

Practice: Watching thematic videos and discussion on the main problematic vectors touched upon in the lesson

6. Module 6. Types of experts

6.1. Lecture: Classification.

Author of the publication, reviewer, scientific supervisor/consultant/editor of the publishing/dissertation project;

official opponent on the dissertation, compiler of the review of the leading organization on the dissertation, author of the review on the abstract of the dissertation, chairman/member of the dissertation council;

expert on grant projects of Russian/foreign/international profiles, expert on the competition of teaching staff in Russian and foreign universities

Practice: Watching thematic videos and discussion on the main problematic vectors touched upon in the lesson

7. Module 7. Methodology of expertise and its qualitatization

7.1. Lecture: Types of approaches in the evaluation of research: content, formalized, formal, hybrid and systemic approaches: theory and practice.

Practice: Watching thematic videos and discussion on the main problematic vectors touched upon in the lesson

7.2. Lecture: Russia and abroad. The general level of expertise in various academic organizations: advantages and disadvantages.

Specialization and interdisciplinarity

Practice: Watching thematic videos and discussion on the main problematic vectors touched upon in the lesson

8. Module 8. Expert's personality vs employer: quality control of expertise and control over the activities of its author

8.1. Lecture: Competence of the expert and versatility of his skills (beginning).

Criteria for assessments. Independence in academic work. Personal responsibility: legal and moral aspects. Influence on the deployment of specific research trends and the formation of scientific knowledge in general.

Practice: Watching thematic videos and discussion on the main problematic vectors touched upon in the lesson

8.2. Lecture: Competence of the expert and versatility of his skills (end).

The status of the expert when considering the project: the level of influence on the adoption of the final decision; anonymity/de-anonymization: pro et contra.

Practice: Watching thematic videos and discussion on the main problematic vectors touched upon in the lesson

8.3. Lecture: Traditions of checking the proper level of project review results.

Traditions of checking the proper level of project review results. Conditions for returning for revision. The possibility of the author of the application/text to challenge/clarify the results of its assessment. Grounds for annulment of the results of the expertise. Bias of the expert. White, gray and black lists of experts: grounds for formation.

Practice: Watching thematic videos and discussion on the main problematic vectors touched upon in the lesson

5. Description of the material and technical facilities that are necessary for the implementation of the educational process of the course (training module)

The implementation of academic discipline requires an audience of appropriate capacity. When lecturing, a marker or slate, chalk/markers, tables, charts are used. Technical training tools: computer with licensed software, multimedia projector.

6. List of the main and additional literature, that is necessary for the course (training module) mastering

Main literature

Рекомендуемая литература для самостоятельного изучения:

Мокий, В. С. Методология научных исследований. Трансдисциплинарные подходы и методы : учебник для вузов / В. С. Мокий, Т. А. Лукьянова. — 2-е изд., перераб. и доп. — Москва : Издательство Юрайт, 2025. — 229 с. — (Высшее образование). — ISBN 978-5-534-13916-7. — Текст : электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/563858> (дата обращения: 09.04.2025).

Мокий, М. С. Методология научных исследований : учебник для вузов / М. С. Мокий, А. Л. Никифоров, В. С. Мокий ; под редакцией М. С. Мокия. — 3-е изд., перераб. и доп. — Москва : Издательство Юрайт, 2025. — 259 с. — (Высшее образование). — ISBN 978-5-534-18527-0. — Текст : электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/560221> (дата обращения: 09.04.2025).

Additional literature

7. List of web resources that are necessary for the course (training module) mastering

1. BASE (Bielefeld Academic Search Engine): Basic Search (<https://base-search.net/>).
2. Bioline International (<https://bioline.org.br/>).
3. EBSCO Information Services (<https://www.ebsco.com/>).
4. RefSeek — Academic Search Engine (<https://www.refseek.com/>).
5. WorldCat.org: The World's Largest Library Catalog (<https://worldcat.org/>).
6. Antiplagiat (<https://antiplagiat.ru/>).
7. Online Plagiarism Checker (<https://plagiarismcheck.org/>).
8. Plagiarism Checker | 100% Free and Accurate (<https://www.duplichecker.com/>).
9. VroniPlug (<https://vroniplag.de/>).
10. Citation Machine (<https://www.citationmachine.net/>).
11. Payment of rewards for article publications [MIPT] (<https://mipt.ru/science/publication/programmy-2024-goda>).
12. MSU Publishing House [.] Journals (<http://msupublishing.ru/>).
13. ISTINA — Intelligent system for thematic research of scientometric data (<https://istina.msu.ru/>).
14. Clarivate (<https://clarivate.com/>).
15. Master Journal List (<https://mjl.clarivate.com/>).
16. Elsevier (<https://www.elsevier.com/>).
17. Scopus (<https://www.scopus.com/home.uri>).
18. Scimago Journal & Country Rank (<https://www.scimagojr.com/>).
19. HathiTrust Digital Library (<https://www.hathitrust.org/>).
20. Unpaywall (<https://unpaywall.org/>).
21. Open Access Button (<https://openaccessbutton.org/>).
22. Oxford Academic Journals (<https://academic.oup.com/journals>).
23. Cambridge Core (<https://www.cambridge.org/core/>).
24. Nature (<https://www.nature.com/>).
25. Science (<https://www.sciencemag.org/>).
26. PLOS (<https://plos.org/>).
27. SAGE Journals: Your gateway to world-class research journals (<https://www.sagepub.com/>).
28. JSTOR Home (<https://www.jstor.org/>).
29. Ulrichsweb (<https://ulrichsweb.serialssolutions.com/login>).
30. TEI (<https://tei-c.org/>).
31. Academia.edu (<https://www.academia.edu/>).

32. ResearchGate (<https://www.researchgate.net/>).
33. Semantic Scholar (<https://www.semanticscholar.org/>).
34. Google Scholar (<https://scholar.google.ru/>).
35. Google Books (<https://books.google.ru/>).
36. Frontiers (<https://www.frontiersin.org/>).
37. arXiv (<https://arxiv.org/>).
38. Internet Archive (<https://archive.org/>).
39. ProQuest (<https://www.proquest.com/>).
40. ERIC — Education Resources Information Center (eric.ed.gov).
41. Russian State Library (<https://www.rsl.ru/>).
42. Library of Congress (<https://www.loc.gov/>).
43. CyberLeninka (<https://cyberleninka.ru/>).
44. Web of Science Researcher Profiles (<https://clarivate.com/academia-government/scientific-and-academic-research/research-discovery-and-referencing/web-of-science/wos-researcher-profiles/>).
45. ORCID (<https://orcid.org/>).
46. Springer (<https://link.springer.com/>).
47. Wiley Online Library (<https://onlinelibrary.wiley.com/>).
48. Taylor & Francis (<https://taylorandfrancis.com/>).
49. QS World University Rankings 2025 (<https://www.topuniversities.com/university-rankings>).
50. THE [:] Times Higher Education (<https://www.timeshighereducation.com/>).
51. Shanghai Ranking (<https://www.shanghairanking.com/>).
52. East View (<https://www.eastview.com/>).
53. Arzamas (<https://arzamas.academy/>).
54. PostNauka (<https://postnauka.org/>).
55. Vsenauka (<https://vsenauka.ru/>).

8. List of information technologies used for implementation of the educational process, including a list of software and information reference systems (if necessary)

Multimedia technology is used in lecture classes, including the demonstration of presentations.

9. Guidelines for students to master the course

While studying a student should independently replenish his knowledge and study the fundamental publications in subject area. Successful mastering of the course requires hard work of the student directly on lecture, and also independent work for assimilation of the passed material and the solution of the set of theoretical problems.

Assessment funds for course (training module)

major: Biotechnology
specialization: Medical Biotechnology/Медицинская биотехнология
Phystech School of Biological and Medical Physics
Educational and scientific center for the humanities and social sciences
term: 1
qualification: Master

Semester, form of interim assessment: 1 (fall) - Exam

Author: G.R. Konson, doctor of art history, full professor, professor

1. Competencies formed during the process of studying the course

Code and the name of the competence	Competency indicators
UC-1 Use a systematic approach to critically analyze a problem and develop an action plan	UC-1.1 Systematically analyze the problem situation, identify its components and the relations between them
	UC-1.2 Search for solutions by using available sources
	UC-1.3 Develop a step-by-step strategy for achieving a goal, foresee the result of each step, evaluate the overall impact on the planned activity and its participants
UC-5 Analyze and consider cultural diversity in intercultural interactions	UC-5.1 Identify specific philosophical and scientific traditions in major world cultures
	UC-5.2 Define the theoretical and practical significance of cultural and linguistic factors within various interrelated philosophical and scientific traditions
UC-6 Determine priorities and ways to improve performance through self-assessment	YK-6.1 achieve personal growth and professional development, determine priorities and ways to improve performance
	UC-6.2 Evaluate performance results in correlation with the set objectives and applied methods

2. Competency assessment indicators

As a result of studying the course the student should:

know:

- tools for searching for scientific texts and criteria for checking their quality;
- features of the principles of criteria for the selection of scientific information with a focus on the analysis of the background of actors in academic activity;
- fundamentals of scientific research ethics;
- basic international tools for checking the quality of scientific texts and research;
- the main vectors of searching for scientific information and ways to optimize it;
- the basics of building an academic text and its public presentation;
- features of preparing an academic text and the basics of presenting it to the scientific community;
- the basics of building a public representation of the image of a researcher in various academic traditions in the context of the conditions for the formation of science management skills;
- basic approaches to the methodology of expertise and its qualitatization;
- the structure of expertise in relation to its hierarchically subordinate components;
- basic expert positions, such as: author of the publication, reviewer, scientific supervisor/consultant of the dissertation/publishing project, official opponent on the dissertation, compiler of the review of the leading organization on the dissertation, author of the review on the abstract of the dissertation, expert on grant projects of Russian/foreign/international profiles, etc;
- methods of criteria of assessments;
- ways for assessing the novelty and prospects of research results.

be able to:

- justify the assessment of the quality of the tool for searching for scientific texts and criteria for checking their quality;
- identify the main signs of violation of scientific research ethics (plagiarism, data falsification, multiple publication, mysterious authorship, illegal increase in citation, false/attribution authorship, the influence of non-scientific factors on author's ideas);
- use the main vectors of searching for scientific information and ways to optimize it;
- work with modern tools for the formation of scientific research reputation;
- build a public representation of the image of a researcher in various academic traditions in the context of the conditions for the formation of science management skills;
- be able to use the knowledge gained to prepare an academic text and present it to the scientific community;
- formulate the purpose of the expertise;
- criteria for assessing the quality of expertise;
- analyze the quality of data on the topic of the object and subject of expert evaluation;
- assess the novelty and prospects of possible research results;
- clarify the degree of specialization of the project;
- formulate methods for criteria of responses.

master:

- skills in searching for scientific research information and using criteria for its selection in the context of the formation of reputational mechanisms and academic management skills;
- basic skills in recognizing violations of scientific research ethics;- the basics of academic text and its public presentation
- a set of skills and abilities necessary for the formation of professional criteria for expert evaluation of scientific research;
- basic skills of expert thinking in the context of the systemic application of acquired knowledge in subsequent academic activities.

3. List of typical control tasks used to evaluate knowledge and skills

List of typical survey questions:

1. Tell us about the features of grant funding in Russia and foreign countries, focusing on international collaborations.
2. What are "joker cases"? What is the purpose of their appearance?
3. What is the specificity of preparing and defending a dissertation in the Russian and foreign (Western) academic traditions?
4. What is the institute of postdoc and how does it differ from postgraduate and doctoral studies?
5. Give a definition of a predatory publication.
6. What are the main violations of academic ethics that you know?
7. Who are the "hunters" and what are their methods of work?
8. What factors legitimize the work of individuals and structures defined as judges?
9. Why did the phenomenon of so-called hybrids arise and what are the prospects for its further existence?
10. Academic ethics: shield and sword. Who has the future? Why?
11. Working with sources: quality vs quantity. Citation branches = deployment of intellectual trends.
12. Regionalize the main differences in the deployment of academic work.
13. Define the concept of the institute of expertise.
14. Tell us about the features of expertise in Russia and foreign countries.
15. What is the specificity of evaluating dissertations in the Russian and foreign (Western) academic traditions?
16. How is expert training carried out in Russia and abroad?

17. Give a definition of predatory expertise.
18. What are the main violations of academic ethics in conducting expertise that you know?
19. Who and how controls the work of experts?
20. How does the legitimization/delegitimization of the audit of expert activity occur?
21. Give an example of a criteria-based expertise.
22. Academic ethics in expertise: problems and prospects.
23. Evaluation of sources: quality vs quantity. Project influencers and the deployment of scientific knowledge.
24. Regionalize the main differences in the deployment of expert work.

Topics for presentations:

- Data search on Russian and foreign: a) academic platforms, b) popular science portals, c) personal websites of users.
- Checking the quality of information used in scientific work.
- Application of sources in the deployment of independent research.
- Analysis of the expertise of dissertation research.
- Analysis of the expertise of a monograph / key article.
- Analysis of the expertise of a grant project / application for a grant project

4. Evaluation criteria

List of questions:

1. Characterize the main trends in the academic tradition of Russia and foreign countries in the XXI century.
2. Give definitions of key concepts of the planned research.
3. Classify violations in the field of academic ethics.
4. Present recommendations on the use of tools to counter actors that dequalitimize the publication space.
5. Criterialize the principles of selecting publications for effective work.
6. Typologize the main reference systems.
7. Analyze the types of links from the point of view of their depth and multi-vector nature.
8. Consider the possibilities of implementing interdisciplinary studies in your profile area.
9. Describe the most promising approaches in the oral representation of the results of the research.
10. Formulate the basic principles of written presentation of author's ideas.
11. Reveal the educational potential of research in your subject field.
12. Structure the pool of main scientific and organizational problems in your specialty.
13. Try to form a forecast of the development of scientific thought in a specific branch of knowledge;
14. Characterize the main trends in modern expert work in your field in Russia and abroad.
15. Give definitions of key concepts of the concept of expertise.
16. Present recommendations on the use of tools to counter actors that dequalitimize the expert space
17. Criterialize the principles of evaluating publications and projects
18. Describe the most promising approaches in the oral representation of the results of the expertise
19. Formulate the basic principles of written presentation of expert assessment
20. Evaluate the educational potential of the research on which the expertise was conducted
21. Structure the pool of main scientific and organizational problems in the field of expertise in your field of knowledge
22. Try to form a forecast of the development of expert assessment in your specialty.

Example of exam task

1. Structure the pool of main scientific and organizational problems in the field of expertise in your field of knowledge
2. Try to form a forecast of the development of expert assessment in your specialty.

The grade "excellent (10)" - deserves a student who has found a comprehensive, systematic and in-depth knowledge of the educational program material, who has independently completed all tasks provided by the program, who has thoroughly mastered the main and additional literature recommended by the program, who has actively worked in the classroom, who understands the basic scientific concepts of the discipline, who has shown creativity and scientific approach in understanding and presenting the educational program material, whose answer is distinguished by the richness and accuracy of the terms used.

The grade "excellent (9)" - deserves a student who has found a comprehensive, systematic knowledge of the educational program material, independently completed all tasks provided by the program, who has thoroughly mastered the basic literature and familiar with additional literature recommended by the program, actively working in the classroom, showing a systematic nature of knowledge in the discipline, sufficient for further study, as well as the ability to replenish them independently, whose answer is distinguished by the accuracy of the terms used, and the presentation of the material in it after the completion of the program.

The grade "excellent (8)" - deserves a student who has found full knowledge of the educational program material, not allowing significant inaccuracies in the answer, independently completed all the tasks provided by the program, mastered the basic literature recommended by the program, actively working in the classroom, showing a systematic nature of knowledge in the discipline, sufficient for further study, as well as the ability to replenish them independently.

The grade "good (7)" - deserves a student who has found a sufficiently complete knowledge of the curriculum material, not allowing significant inaccuracies in the answer, independently completed all the tasks provided by the program, mastered the basic literature recommended by the program, actively working in the classroom, showing the systematic nature of knowledge in the discipline, sufficient for further study, as well as the ability to replenish them independently.

The grade "good (6)" - deserves a student who has found a sufficiently complete knowledge of the educational program material, not allowing significant inaccuracies in the answer, independently completed the main tasks provided by the program, mastered the basic literature recommended by the program, characterized by sufficient activity in the classroom, showed a systematic nature of knowledge in the discipline, sufficient for further study.

The grade "good (5)" - is deserved by the student who has found out the knowledge of the basic educational program material in the volume necessary for further study and the forthcoming work on profession, not distinguished by activity at classes, independently carried out the basic tasks provided by the program, mastered the basic literature recommended by the program, but made some mistakes at their performance and in the answer at the test, but possessing the necessary knowledge for independent elimination of the admitted mistakes.

The grade "satisfactory (4)" - is deserved by the student who has found out the knowledge of the basic educational program material in the volume necessary for the further study and the forthcoming work on a profession, not distinguished by activity at classes, independently carried out the basic tasks provided by the program, mastered the basic literature, recommended by the program, however made some errors at their performance and in the answer on the credit, but possessing necessary knowledge for elimination under the guidance of the teacher of the admitted errors.

The grade "satisfactory (3)" - deserves a student who found knowledge of the basic educational program material in the volume necessary for further study and future work in the profession, not distinguished by activity in the classroom, independently completed the main tasks provided by the program, but made errors in their performance and in the answer at the test, but has the necessary knowledge to eliminate the most significant errors under the guidance of the teacher.

The grade "unsatisfactory (2)" - is given to the student who has found gaps in knowledge or lack of knowledge of a significant part of the basic educational program material, who has not performed independently the basic tasks provided by the program, who has made fundamental errors in the performance of tasks provided by the program, who makes significant errors in the answer, and is unable to continue learning or start professional activity without additional training in the relevant discipline.

The grade "unsatisfactory (1)" - no answer (refusal to answer) or the submitted answer does not correspond to the essence of the questions contained in the assignment.

5. Methodological materials defining the procedures for the assessment of knowledge, skills, abilities and/or experience

Final assessment in the discipline Search and verification of data for research and its expertise is carried out in the form of an exam. The exam is conducted in oral form. Time for preparing is 30 minutes.