**AL-FARABI KAZAKH NATIONAL UNIVERSITY**
**Medicine and Health Care Faculty**
**Higher School of Medicine**
**Department of Fundamental Medicine**

AFFIRM
Dean of the Faculty
_____
Issaeva R.B.
"_____" _____ 2023

# EDUCATIONAL AND METHODICAL COMPLEX OF DISCIPLINE

# GOOD PRACTICE IN BIOMEDICAL RESEARCH

**Educational program**

**M143 BIOMEDICINE**

**Course – 1**

**Semester – 1**

**Number of credits – 5 (5 ECTS)**

**Almaty, 2023**

Educational and methodical complex of discipline was compiled by PhD Akhayeva T.A., PhD Seytalieva A.M.

Based on the educational program M143 BIOMEDICINE

Considered and recommended at a meeting of the fundamental medicine department from "___" _____ 202_, protocol No.___

Head of the department _____ Sarsenova L. K.

Recommended by the Methodological Council of the Higher School of Medicine

"____" _____ 202__, protocol No.___

Chairman of the Academic Committee of M&HF _____ Sarsenova L. K.

**SYLLABUS**
**Fall semester 2023-2024 academic year**
**Educational program " Good practice in biomedical research"**

| | | | |
|---|---|---|---|
| **1.** | **ACADEMIC INFORMATION ABOUT THE SUBJECT** | | |
| 1.1 | Faculty/school:<br>Faculty of medicine and healthcare<br>Higher school of medicine<br>Department of Fundamental medicine | 1.6 | Number of credits (ECTS):<br>General number of credits:5<br>practical classes 5 credits<br>0/5/0/0 |
| 1.2 | Educational program (EP):<br>M143 BIOMEDICINE | 1.7 | Prerequisites: |
| 1.3 | Agency and year of EP accreditation<br>IAAR 2023 | 1.8 | Independent work of the student:<br>1,5 credits 46 hours |
| 1.4 | Name of subject:<br>Good practice in biomedical research | 1.9 | Independent work of the student under the guidance of a teacher (IWST):<br>0.45 credits 14 hours |
| 1.5 | Subject ID: 91159<br>Subject code: FAYa3107 | 1.10 | Mandatory component |
| **2.** | **Description of subject** | | |
| | The profile discipline of the university component. Discipline The discipline examines the issues of good practice of biomedical research. The discipline provides for strengthening the knowledge and skills of researchers in the field of biomedicine in order to ensure their effective implementation in research practice through informed decision-making by a researcher in the context of a research group in accordance with international practice | | |
| **3** | **Purpose of subject** | | |
| The purpose of the course: to master the basic level of knowledge and skills of good practice of biomedical research in accordance with international standards and the requirements of the legislation of the Republic of Kazakhstan. | | | |
| **4.** | **Learning outcomes (LO) of subject** | | |
| | 1. Critically apply the main provisions of methodologies; conceptual approaches to design creation; the process of conducting preclinical biomedical research; the process of conducting clinical biomedical research; the importance and value of research results; relevant guidance documents and their structures.<br><br>3. Critically apply regulatory and legal documents of the Republic of Kazakhstan; | | 2. To determine the types of biomedical research; to organize biomedical research; to monitor the effectiveness of biomedical research; to use methodologies in drawing up the justification for reporting research results.<br><br>4. Critically use the sources of up-to-date information, databases in the field of good practice of biomedical research for the continuous development and updating of knowledge and skills in the changing context of biomedical science and practice. |
| **5.** | **Formative assessment methods:** | | |
| 5.1 | Control work | 5.5 | Listening |
| 5.2 | Written task | 5.6 | Colloquium (Written) |

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| 5.3 | Oral questioning | 5.7 | Exam (Writtten) |
| 5.4 | Test | | |

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| **6.** | **Detailed information about the subject** | | |
| 6.1 | Academic year: 2023-2024 | 6.3 | Schedule (Monday, Tuesday,Wednesday,Thursday, Friday 09:00-15:00): |
| 6.2 | Semester: 1 | 6.4 | Location (academic building, office, platform and link to the training meeting using DOT):<br>**Tole bi St.96, room 319** |

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| **7.** | **Teacher** | | |
| Position | Full Name | Contact information (tel., e-mail) | Time for consultations or by appointment |
| Teacher | Akhayeva T.A. | Seytaliyeva.aida @med-kaznu.com | Before exam sessions within 60 minutes |
| | | | |

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| **8.** | **Subject content** | |
| Week # | Topics and tasks | Hours |
| 1. | Practical lesson: Ethical aspects of biomedical research. Basic concepts and definitions. Types of research. The role of scientific data. Definition of GLP, GCP. The history of the issue. Regulatory documents regulating biomedical research. | 6 |
| | Task (if available) | |
| | Literature for reading (textbook, pages and chapters)<br>1. Guidelines for the experimental (preclinical) study of new pharmacological substances. Mironov A.N. and kollek.authors. M.: Vulture and K, 2012.- 944 p.<br>2. Quality management system in laboratories. 2013, WHO. Manual, 271 p.<br>3. Competence model for leaders/laboratory managers. VAZ, 2019, 59 p.<br>4. Laboratory Management, Principles and Processes, Fourth Edition by Dr. Denise M. Harmening, June 30, 20209 | |
| 2. | Practical lesson: Ethical aspects of biomedical research. Basic concepts and definitions. Types of research. The role of scientific data. Definitions of GLP, GCP. The history of the issue. Regulatory documents regulating biomedical research. | 6 |
| | Task (if available) | |
| | Literature for reading (textbook, pages and chapters)<br>1. Guidelines for the experimental (preclinical) study of new pharmacological substances. Mironov A.N. and kollek.authors. M.: Vulture and K, 2012.- 944 p.<br>2. Quality management system in laboratories. 2013, WHO. Manual, 271 p. | |

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| 3. | Practical lesson: Research design. The purpose of the study development. The structure of the study. Stages of the study. Research design as a planning process. Assessment and monitoring of biomedical research. | 6 |
| | Task (if available) | |
| | Literature for reading (textbook, pages and chapters)<br>1. Guidelines for the experimental (preclinical) study of new pharmacological substances. Mironov A.N. and kollek.authors. M.: Vulture and K, 2012.- 944 p.<br>2. Quality management system in laboratories. 2013, WHO. Manual, 271 p. | |
| 4. | Practical lesson: Research design. Discussion of draft research protocols. Developing the skill of design design. | 6 |
| | Task (if available) | |
| | Literature for reading (textbook, pages and chapters)<br>1. Guidelines for the experimental (preclinical) study of new pharmacological substances. Mironov A.N. and kollek.authors. M.: Vulture and K, 2012.- 944 p.<br>2. Quality management system in laboratories. 2013, WHO. Manual, 271 p. | |
| 5. | Practical lesson: GLP: Review of regulatory international documents in the field of medical research ethics. The history and principles of GLP. Application of GLP principles. Inspection and Accreditation program. | 6 |
| | Task (if available) | |
| | Literature for reading (textbook, pages and chapters)<br>1. Guidelines for the experimental (preclinical) study of new pharmacological substances. Mironov A.N. and kollek.authors. M.: Vulture and K, 2012.- 944 p.<br>2. Quality management system in laboratories. 2013, WHO. Manual, 271 p. | |
| | **IWST 1** Presentation of the results of the mini-project. | |
| 6. | Practical lesson: Review of regulatory international documents in the field of ethics of medical research. The history and principles of GLP. Duties of the researcher. | 6 |
| | Task (if available) | |
| | Literature for reading (textbook, pages and chapters)<br>1. Guidelines for the experimental (preclinical) study of new pharmacological substances. Mironov A.N. and kollek.authors. M.: Vulture and K, 2012.- 944 p.<br>2. Quality management system in laboratories. 2013, WHO. Manual, 271 p. | 7 |
| 7. | Practical lesson: Quality assurance system for laboratory research. Basic ethical principles of laboratory research. Working conditions, equipment and materials in the context of GLP. Concepts about the basic principles of preclinical research. | 6 |

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| | Task (if available) | 23 |
| | Literature for reading (textbook, pages and chapters)<br>1. Guidelines for the experimental (preclinical) study of new pharmacological substances. Mironov A.N. and kollek.authors. M.: Vulture and K, 2012.- 944 p. | |
| **Colloquium 1** | **Colloquium** | |
| 8. | Practical lesson: Quality assurance system for laboratory research. Basic ethical principles of laboratory research.Training in the skills of working with documents of preclinical research (practical work with samples of documents).. | |
| | Task (if available) | |
| | Literature for reading (textbook, pages and chapters)<br>1. Guidelines for the experimental (preclinical) study of new pharmacological substances. Mironov A.N. and kollek.authors. M.: Vulture and K, 2012.- 944 p.<br>2. Quality management system in laboratories. 2013, WHO. Manual, 271 p. | |
| 9. | Practical lesson: Safety management International regulations, general ethical standards formulated in the Helsinki Declaration of the WMA. International regulatory documents on the protection of animals used for scientific purposes. Directive 2010/63/EU. | 6 |
| | Task (if available) | |
| | Literature for reading (textbook, pages and chapters)<br>1. Guidelines for the experimental (preclinical) study of new pharmacological substances. Mironov A.N. and kollek.authors. M.: Vulture and K, 2012.- 944 p.<br>2. Quality management system in laboratories. 2013, WHO. Manual, 271 p. | |
| 10. | Practical lesson: Data management. Qualifications and responsibilities of the researcher. Rules for the researcher. Responsibilities of the research sponsor and contract research organization | 6 |
| | Task (if available) | |
| | Literature for reading (textbook, pages and chapters)<br>1. Guidelines for the experimental (preclinical) study of new pharmacological substances. Mironov A.N. and kollek.authors. M.: Vulture and K, 2012.- 944 p.<br>2. Quality management system in laboratories. 2013, WHO. Manual, 271 p. | |
| | **IWST** Presentation of the results of the mini-project. | |
| 11. | Practical lesson: Development of standard operating procedures (SOP). Structure, purpose, rules for the design of standard operating procedures (SOP). | 6 |
| | Task (if available) | |

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| | Literature for reading (textbook, pages and chapters)<br>1. Guidelines for the experimental (preclinical) study of new pharmacological substances. Mironov A.N. and kollek.authors. M.: Vulture and K, 2012.- 944 p.<br>2. Quality management system in laboratories. 2013, WHO. Manual, 271 p. | |
| 12. | Practical lesson: Development of standard operating procedures (SOP). Work in a group: Development of SOPs. Presentation Of Soups. Discussion. | 6 |
| | Task (if available) | |
| | Literature for reading (textbook, pages and chapters)<br>1. Guidelines for the experimental (preclinical) study of new pharmacological substances. Mironov A.N. and kollek.authors. M.: Vulture and K, 2012.- 944 p.<br>2. Quality management system in laboratories. 2013, WHO. Manual, 271 p. | 7 |
| 13. | Practical lesson: Monitoring, auditing and inspection of laboratory tests. Determination of the reliability of the data, testing according to the research protocol and standard operating procedures. Assessment of the degree of compliance with the principles of GLP procedures and practical actions of the testing laboratory. | |
| | Task (if available) | |
| | Literature for reading (textbook, pages and chapters)<br>1. Guidelines for the experimental (preclinical) study of new pharmacological substances. Mironov A.N. and kollek.authors. M.: Vulture and K, 2012.- 944 p.<br>2. Quality management system in laboratories. 2013, WHO. Manual, 271 p. | |
| 14. | Practical lesson: General principles of clinical trial planning and analysis of their results. | 6 |
| | Task (if available) | |
| | Literature for reading (textbook, pages and chapters)<br>1. Guidelines for the experimental (preclinical) study of new pharmacological substances. Mironov A.N. and kollek.authors. M.: Vulture and K, 2012.- 944 p.<br>2. Quality management system in laboratories. 2013, WHO. Manual, 271 p. | 23 |
| | **IWST 3** | |
| **Colloquium 2** | **Colloquium** | |
| 15. | Practical lesson: Problems and prospects of further development of good practice of biomedical research. | 6 |
| | Task (if available) | |
| | Literature for reading (textbook, pages and chapters)<br>1. Guidelines for the experimental (preclinical) study of new pharmacological substances. Mironov A.N. and kollek.authors. M.: Vulture and K, 2012.- 944 p. | |

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|---|---|---|
| | 2. Quality management system in laboratories. 2013, WHO. Manual, 271 p. | |
| **Sum** | | |
| **9.** | **Teaching methods of the subject*** (individual, group, streaming, discussion, Problem Based Learning (PBL), Team Based Learning (TBL) | |
| 10. | **Methods of formative assessment:** quiz, test, self-assessment test, reflexive essay, commenting) | |
| 11. | **Summative assessment methods (from point 5):**<br>- Oral questioning<br>- Written tasks<br>- Test questions<br>- Listening | |
| **10.** | **Summative assessment** | |

| # | **Type of educational activity** | **Date** | **Points** | **as a percentage %** |
|---|---|---|---|---|
| 1 | Lecture | - | - | Not graded |
| 2 | Practical class (current control)<br>1. Test<br>2. Written control<br>3. Working with models<br>4. Oral interview | According to the schedule | 7 points for class | 2% out of IE (100 %) |
| 3 | Colloquium 1<br>written control | According to the schedule, in the 7th week | Max score 45 | 1 stage - … points =…% out of IE1<br>2 stage - … points =…% out of IE1 |
| | Colloquium 2<br>written control | According to the schedule, in the 14th week | Max score 45 | |
| | IWS | Week 7,14 | 5 points | 5% out of IE1 |
| | IWST 1 | Week 6 | 55 points, cumulative | |
| | IWST 2 | Week 12 | 55 points, cumulative | 30% of the final grade for the subject |
| | | | | |
| 4 | Final exam | According to the session schedule | 100 points:<br>Written | 40 % of the final score |

| **10.** | **Assessment** | | |
|---|---|---|---|
| **Rating by letter system** | **Digital equivalent of points** | **Percentage Digital equivalent of points Percentage** | **Description of the assessment** (changes should be made only at the level of the decision of the Academic Quality Committee of the faculty) |
| A | 4,0 | 95-100 | **Excellent.** Exceeds the highest task standards. |
| A- | 3,67 | 90-94 | **Excellent.** Meets the highest standards of the assignment. |
| B+ | 3,33 | 85-89 | **Good.** Very good. Meets the high standards of the assignment. |
| B | 3,0 | 80-84 | **Good.** Meets most of the job standards. |
| B- | 2,67 | 75-79 | **Good.** More than enough. Shows some reasonable ownership of the material. |
| C+ | 2,33 | 70-74 | **Good.** Acceptable.<br>Meets the basic standards of the task. |
| C | 2,0 | 65-69 | **Satisfactory.** Acceptable. Meets some basic job standards. |
| C- | 1,67 | 60-64 | **Satisfactory.** Acceptable. Meets some basic job standards. |
| D+ | 1,33 | 55-59 | **Satisfactory.**<br>Minimally acceptable. |
| D | 1,0 | 50-54 | **Satisfactory.**<br>Minimally acceptable. The lowest level of knowledge and completion of the task. |
| FX | 0,5 | 25-49 | **Unsatisfactory.**<br>Minimally acceptable. |
| F | 0 | 0-24 | **Unsatisfactory.**<br>Very low productivity. |

| **11.** | **Educational resources** *(use the full link and specify where you can access the texts/materials)* |
|---|---|
| Literature | Basic 1.Guidelines for the experimental (preclinical) study of new pharmacological substances. Mironov A.N. and kollek.authors. M.: Vulture and K, 2012.- 944 p.<br>2. Quality management system in laboratories. 2013, WHO. Manual, 271 p.<br>3. Competence model for leaders/laboratory managers. VAZ, 2019, 59 p.<br>4. Laboratory Management, Principles and Processes, Fourth Edition by Dr. Denise M. Harmening, June 30, 2020 |
| | Additional<br>5. http://kharkiv-lab.com/wp-content/uploads/2017/03/QMS02-A6_ru_EB.pdf CLSI. Quality management system: preparation and management of laboratory documentation; approved manual – sixth edition. Document CLSI |

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| | QMS02-A6. Uin, Pennsylvania: Institute of Clinical and Laboratory Research; 2013.<br>6. Decision of the Council of the Eurasian Economic Commission of November 3, 2016 No. 81 "On approval of the Rules of Good Laboratory Practice of the Eurasian Economic Union in the field of circulation of medicines";<br>7. GOST 33044-2014 "Principles of good laboratory practice"<br>8. Directive 2010/63/EC of the European Parliament and of the Council of the European Union of 22 September 2010 on the protection of animals used for scientific purposes (Complies with the requirements of the European Economic Area);<br>9. Guidelines for the maintenance and use of laboratory animals. Eighth edition / translated from English. Edited by I.V. Belozertseva, D.V. Blinova, M.S. Krasilshchikova. – Moscow: IRBIS, 2017. – 304 p.;<br>10. Guidelines for the maintenance and use of laboratory animals (Guidelines for the care and use of laboratory animals. Publishing House of the National Academy. – Washington, DC, 2011); |
| Electronic resources (including, but not limited to: electronic library catalog, databases of scientific literature, databases, animation, modeling, professional blogs, websites, other electronic reference materials (for example, video, audio, digests) | Webofscience.com<br>Scopus.com<br>Nih.gov<br>https://www.listenaminute.com/<br>https://www.health.harvard.edu/a-through-c |
| Laboratory physical resources | - |
| Special software | |

| **12.** | **Teacher's expectations from students** |
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The student

- attends all classes and lectures
- actively participates in classroom classes during formative assessment, in group work,
- performs tasks on time
- shows respect for teachers, university staff and students
- carefully handles university property (models, desks, chairs, etc.)
- observes cleanliness and order on campus and classrooms
- uses gadgets in classes only with the teacher's permission
- for all issues within the discipline is addressed to the teacher of this discipline, for general academic issues – to his advisor
- correspondence is carried out only through a messenger approved by the teacher, at the time regulated by the teacher

| **13.** | **Discipline Policy** |
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The discipline policy is determined by the **Academic Policy** and the Policy of Academic Integrity of Al-Farabi Kazakh National University .
If the links will not open, then you can find the relevant documents in the Univer IC.

The student is obliged to:
- attend classes in a white coat
- wear gloves when working with models

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| | …<br>The student must follow the Code of Professional Conduct of Higher School of Medicine<br><br>The behavior of the student at the exams is regulated by the "Rules for the final control", "Instructions for the final control of the autumn / spring semester of the current academic year" (current documents are uploaded to the IS "Univer" and updated before the start of the session); "Regulations on checking text documents of students for the presence of borrowings". |
| **14.** | **Principles of inclusive learning** |
| | **1. Constantly preparing for classes:**<br>For example, supports statements with appropriate links, makes short summaries<br>Demonstrates effective learning skills, helps in teaching others<br>**2. Take responsibility for your training:**<br>For example, manages your training plan, actively tries to improve, critically evaluates information resources<br>**3. Actively participate in the group's training:**<br>For example, actively participates in the discussion, willingly takes assignments<br>**4. Demonstrate effective group skills**<br>For example, he takes the initiative, shows respect and correctness towards others, helps to resolve misunderstandings and conflicts<br>**5. Skillful communication skills with peers:**<br>For example, he listens actively, is receptive to nonverbal and emotional signals<br>Respectful attitude<br>**6. Highly developed professional skills:**<br>Strives to complete tasks, looking for opportunities for more training, confident and qualified<br>Compliance with ethics and deontology in relation to patients and medical staff<br>Insubordination.<br>**7. High introspection:**<br>For example, he recognizes the limitations of his knowledge or abilities, without becoming defensive or reproaching others<br>**8. Highly developed critical thinking:**<br>For example, accordingly demonstrates skills in performing key tasks, such as generating hypotheses, applying knowledge to cases from practice, critically evaluating information, making conclusions aloud, explaining the process of reflection<br>**9. Fully complies with the rules of academic behavior with understanding, offers improvements in order to increase efficiency.**<br>Observes the ethics of communication – both oral and written (in chats and appeals)<br>**10. Fully complies with the rules with full understanding of them, encourages other members of the group to adhere to the rules**<br>Strictly adheres to the principles of medical ethics and PRIMUM NON NOCER |
| **15.** | **Distance/Online learning** |
| Distance/online learning is implemented at the University in accordance with the Order of the Minister of Education and Science of the Republic of Kazakhstan dated March 20, 2015 No. 137 "On approval of requirements for educational organizations to provide distance learning and rules for organizing the educational process for distance learning and in the form of online learning for educational programs of higher and (or) postgraduate education"; according to the Rules of the organization of training with the use of DOT at the University; Instructions for the final control of the autumn/spring semester of the current academic year (the current document is in the IS "Univer"); "Regulations on checking text documents of students for the presence of borrowings". | |
| **16.** | **Approval and review** |

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| Head of the Department | | Sarsenova L.K. |
| Academic Committee of M&HC | Protocol No. | Date of approval |
| Chairman of the Academic Committee of M&HC | | Sarsenova L.K. |

**RUBRICATOR OF EVALUATION OF LEARNING OUTCOMES**

**in summative evaluation**

**Score-rating of practical exercises (maximum 100 points)**

| № | Criteria (assessed a point system) | Scale, points | | | | |
|---|---|---|---|---|---|---|
| | | 90 - 100 | 70 - 89 | 50 - 69 | 25 - 49 | 0-24 |
| | | That's great. | All right. | Satisfactory | Unsatisfactory (FX) | Unsatisfactory (F) |
| | | Criteria | | | | |
| | | 1. all key aspects are included and presented in a logical manner;<br>2. high accuracy (relevance, without redundancy) and constant attention to the issue;<br>3. excellent integration of theoretical issues;<br>4. providing relevant examples;<br>5. in-depth analysis and theoretical justification of the problem (if applicable), with all key aspects identified and interpreted;<br>6. fluent command of professional terminology | 1. all key aspects are included and presented in a logical manner;<br>2. a sustained focus on the issue with satisfactory precision, relevance and/or some redundancy;<br>3. satisfactory integration of theoretical issues;<br>4. lack of examples;<br>5. satisfactory analysis and theoretical justification of the problem (if applicable), most key aspects are identified and interpreted;<br>6. correct use of professional terminology | 1. most of the key aspects are included;<br>2. satisfactory focus on the question - some errors and/or noticeable redundancy;<br>3. theoretical problems presented without notable integration;<br>4. providing unsuccessful examples or no examples;<br>5. some analysis and theoretical justification of the problem (if applicable), most of the key aspects are identified and interpreted;<br>6. correct use of professional terminology | 1. missing most of the key aspects;<br>2. lack of attention to the issue - not relevant and much redundancy;<br>3. some theoretical problems presented in some way;<br>4. missing or irrelevant examples;<br>5. some analysis and theoretical justification of the problem (if applicable), missing most key aspects;<br>6. omissions in the use of professional terminology | 1. missing most of the key aspects;<br>2. lack of attention to the issue - not relevant and much redundancy;<br>3. some theoretical problems presented in some way;<br>4. missing or irrelevant examples;<br>5. some analysis and theoretical justification of the problem (if applicable), missing most key aspects;<br>6. omissions in the use of professional terminology |

**Rating assessment of SRS - creative assignment (maximum 90 points) + bonuses for English and time management**

| | | 20 | 15 | 10 | 5 |
|---|---|---|---|---|---|
| **1** | **Focusing on the problem** | Organized focused, highlights all relevant to the main problem identified with an understanding of the specific clinical situation | Organized, focused, highlights all relevant to the main problem identified, but no understanding of the specific clinical situation | Unfocused, Distraction by issues not related to the main problem identified | Inaccurate, misses the point, inappropriate data. |

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| **2** | **Informative, effective presentation** | Fully conveyed all relevant information on the topic in a free, consistent, logical manner<br>The form of the product is adequately chosen | Delivered all necessary information in a logical manner, but with minor inaccuracies | All necessary information on the topic is presented chaotically, with minor errors | Failure to reflect important information on the topic, gross errors |
| **3** | **Credibility** | The material is selected on the basis of verifiably established facts.<br>Demonstrating understanding by level or quality of evidence | Some findings and conclusions are formulated on the basis of assumptions or incorrect facts. No full understanding of the level or quality of evidence | Insufficient understanding of the problem, some findings and conclusions are based on incomplete and unproven data - questionable resources used | Findings and conclusions are unsubstantiated or incorrect |
| **4** | **Logicality and consistency** | The presentation is logical and coherent, has internal unity, the provisions in the product follow one from another and are logically interconnected with each other | It has internal unity, the product clauses follow one from the other, but there are inaccuracies. | There is no consistency or logic in the presentation, but manages to trace the main idea | Jumps from one thing to another, hard to grasp the main idea |
| **5** | **Literature analysis** | Literature data is presented in logical relationships, demonstrating in-depth elaboration of primary and supplementary information resources | Literature data demonstrates the elaboration of the core literature | Literature is not always to the point, does not support logical and evidence-based presentations | Inconsistent and chaotic presentation of data, contradictions<br>No knowledge of the core textbook |
| **6** | **Practical relevance** | High | Significantly | Not enough | Not acceptable |
| **7** | **Applicability in future practice** | High | Applicable | Not enough | Not acceptable |

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|---|---|---|---|---|---|
| **8** | **Visibility of the presentation, quality of the report (speaker's evaluation)** | Correctly and appropriately used all the features of Power Point or other e-gadgets, fluent mastery of the material, confident manner of presentation | Overloaded or underutilized visual materials, incomplete mastery of material | Visual materials are not informative does not confidently report | Does not own the material, does not know how to present it |
| **9** | **English/Russian/Kazakh language*** | The product is fully submitted in English/Russian/Kazakh language (checked by the Head of Department) + **10-20 points** depending on quality | The product was prepared in English, submitted for Russian/customization + **5-10 points** depending on quality (or vice versa) | English-language sources were used in the preparation of the product + **2-5 points depending on quality** | |
| **bonus** | **Time Management** ** | Product delivered ahead of schedule **10 points** | Product delivered on time - **no points are awarded** | Delayed delivery without affecting quality **Minus 2 points** | Delayed delivery **Minus 10 points** |
| **bonus** | **Rating** *** | Additional points (up to 10 points) | Outstanding work, for example: Best work in the group Creative approach Innovative approach to the assignment On the proposal of the group | | |
| | * - for Kazakh/Russian groups - English language; for groups studying in English - performance of the task in Russian or Kazakh language<br>*The deadline is determined by the instructor, usually the day of the end-of-term inspection<br>** in this way, you can get a maximum of 90 points, to get above 90 - you need to show a result higher **than expected** | | | | |

**Checklist for self-assessment of team effectiveness**

| **You** | I personally | Group as a whole | Comments |
|---|---|---|---|
| Effectively clarify your tasks and assignments at every stage? | | | |
| Evaluating the progress of the work? | | | |
| Clarify and document whatever the group decides? | | | |

| | | | |
|---|---|---|---|
| Clarifying who will do what and how? | | | |
| Clarify by what deadline each assignment is due? | | | |
| Setting rules on meeting management? | | | |
| Do we stick to the agreed-upon rules? | | | |
| Listening to each other? | | | |
| Allowing certain team members to dominate? | | | |
| Allowing some team members to opt out/ recuse themselves? | | | |
| Sacrificing personal desires for the success of the team? | | | |
| Recognize the feelings of other team members? | | | |
| Contributing equally to the team's progress? | | | |
| Adhering to agreed rules on spelling and naming files? | | | |

| № | **Criteria for student evaluation in practical classes when performing group assignments** |
|---|---|
| 1 | *Class Preparation:*<br>Researches information focusing on the case and issues of concern, utilizes a variety of sources, supports assertions with appropriate references |
| 2 | *Group skills and professional attitudes*:<br>Demonstrates excellent attendance, reliability, accountability<br>Takes the initiative, actively participates in discussions, helps fellow group members, willingly accepts tasks |
| 3 | *Communication Skills:*<br>Listens actively, shows emotions according to the situation, is receptive to nonverbal and emotional cues, shows respect and correctness towards others, helps resolve misunderstandings and conflicts |
| 4 | *Skills in providing feedback:*<br>Demonstrates a high level of self-reflection, critically evaluates self and colleagues, provides constructive and objective feedback in a friendly manner, accepts feedback without opposition |
| 5 | *Critical thinking and effective learning skills:*<br>Effectively participates in generating hypotheses and formulating problem questions, provides relevant examples from life, skillfully applies knowledge to the problem/case at hand, critically evaluates information, draws conclusions, explains and substantiates statements, draws diagrams and pictures, demonstrates a constant interest in the material being studied |
| 6 | *Theoretical knowledge and skills on the topic of the class:*<br>All key aspects are presented logically; accuracy, relevance of answers to the questions posed without redundancy; integration of theoretical issues; use of relevant examples; correct use of professional terminology |