

To the Accreditation Council of the
Eurasian Centre for Accreditation
and Quality Assurance
of Education and Health Care
December 24, 2024

**REPORT OF THE
EXTERNAL EXPERT COMMISSION
ON THE RESULTS OF THE EVALUATION OF THE
EDUCATIONAL PROGRAMME
7M10128 "BIOLOGICAL SAFETY"
OF ASTANA MEDICAL UNIVERSITY
FOR COMPLIANCE WITH THE STANDARDS OF ACCREDITATION OF
EDUCATIONAL PROGRAMMES OF MASTER'S DEGREE SPECIALTIES IN
HEALTHCARE**

Period of external expert evaluation: December 12-13, 2024

Astana, 2024

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LIST OF SYMBOLS AND ABBREVIATIONS

Abbreviation	Designation
AIS	automated information system
AMP	administrative and managerial personnel
BD	basic disciplines
IDC	intra-departmental control
HEI	higher educational institution
EFME	World Federation of Medical Education
SAC	state attestation commission
SCES RK	state compulsory education standard of the Republic of Kazakhstan
SEC	state examination commission
JD	job description
UNT	unified national testing
ECAQA	Eurasian Centre for Accreditation and Quality Assurance in Education and Health Care
FSC	final state certification
FSE	final state exam
IWPT	individual teacher work plan
IMS	integrated management system
ISO	International Organization for Standardization
IEP	individual educational plan
RS	research school
EC	elective component
CIS	Corporate Information System
CCES MES RK	Committee for Control in the Sphere of Education and Science of the Ministry of Education and Science of the Republic of Kazakhstan
TBL	team-based learning
CTA	comprehensive testing of applicants
CED	catalog of elective disciplines
MPO	medical and preventive organization;
MPI	medical and preventive institutions
IAC	international academic cooperation
MOH RK	Ministry of Health of the Republic of Kazakhstan
IDM	Inter-departmental meeting
MSHE RK	Ministry of Science and Higher Education of the Republic of Kazakhstan
ISTC	international scientific and technical cooperation
IEA	international educational activities
EFQM Model	European Foundation for Quality Management Excellence Model
MES RK	Ministry of Education and Science of the Republic of Kazakhstan
IEC	international educational cooperation
IS ISO	ISO international standard
NJSC University	"AMU", Non-profit joint-stock company "Astana Medical University"

1. Composition of the External Expert Commission

In accordance with the order of the ECAQA No. 37 dated November 28, 2024, the External Expert Commission (hereinafter referred to as the EEC) was formed to conduct an external evaluation of the educational programme of the master's degree in the specialty "7M10128 "Biological Safety" of the NJSC "Astana Medical University" in the period December 12-13, 2024, in the following composition:

No.	Status in the EEC	Full name	Academic degree/title, position, place of work/place of study, year, specialty
1	Chairman	Serikova-Yesengeldina Dinara Serikovna	PhD, Senior Lecturer, Head of the Department of Public Health, NJSC "Semey Medical University"
2	International Expert	Isaeva Natalia Viktorovna	Doctor of Medical Sciences, Professor of the Department of Epidemiology with a course in Hygiene and Epidemiology, FDPE. Vice-Rector for Continuous Professional Development, Perm State Medical University named after Academician Ye.A. Wagner
3	Academic Expert	Yeshmanova Ainur Kairkenovna	Candidate of Medical Sciences, Associate Professor, Geriatrician of the highest category, Professor of the Department of General Medical Practice, NJSC "Kazakh National Medical University named after S.D. Asfendiyarov"
4	Academic Expert	Maukaeva Saule Boranbaevna	Candidate of Medical Sciences, doctor of the highest category, associate professor of the Department of Infectious Diseases, Dermatovenereology and Immunology of the NJSC "Semey Medical University"
5	Employer Expert	Aushakhmetova Zabira Tezekbaevna	Candidate of Medical Sciences, Head of the Testing Laboratory of the State Enterprise "Astana su arnasy", Independent expert of the Public Association "Federation of Laboratory Medicine", Expert-auditor for product certification
6	Master's Student Expert	Arkhatova Gaukhar	2nd year master's student in the specialty "Innovation Management" of the Eurasian University named after L.N. Gumilyov

The work of the EEC was carried out in accordance with the Regulation on the EEC.

The EEC report includes a description of the results and the conclusion of the external evaluation of the educational programme of the master's degree "7M10128 "Biological Safety" for compliance with the standards for accreditation of educational programmes of master's specialties in health care and conclusions (hereinafter referred to as the standards for accreditation), recommendations of the EEC for further improvement of approaches and conditions for the implementation of the above-mentioned educational programme and recommendations for the ECAQA Accreditation Council for accreditation.

2. General part of the final report

2.1 Presentation of the educational programme of the master's degree in the specialty "7M10128 "Biological Safety" of the NJSC "Astana Medical University"

Name of the organization, legal form of ownership, BIN	Non-profit Joint Stock Company "Astana Medical University"
Managing body	Ministry of Health of the Republic of Kazakhstan
Full name of the first director	Koikov Vitaly Viktorovich
Date of the university foundation	1964
Location and contact details	Republic of Kazakhstan, 010000, Astana, Beibitshilik St., 49A
State license for educational activities in the master's program (date, number)	03/19/2019, No. KZ93LAA00014823
Inclusion in the Register of educational programmes of higher and postgraduate education of the National Centre for Higher Education Development of the Ministry of Higher Education and Higher Education of the Republic of Kazakhstan	06/30/2023
Information on branches, subsidiaries (if any)	None
Year of commencement of the implementation of the accredited educational programme (EP)	2024
Duration of study	1 year
Total number of graduates since the beginning of the EP	-
Number of master's students in the EP since the beginning of the current academic year	1
Full-time teachers/part-time workers involved in the implementation of the EP, incl. % of Sedateness	Total number of teachers - 12, including full-time - <u>9</u> , part-time - <u>3</u> . Sedateness - <u>58%</u>
Website Instagram Facebook with active pages	https://amu.edu.kz/ https://www.instagram.com/amu_mua_official/ https://www.facebook.com/MeduniverAstana/

The history of NJSC "Astana Medical University" (hereinafter - NJSC "AMU") is a 60-year-long path of development and improvement. The University was founded in October 1964 as the Tselinograd State Medical Institute by the decision of the Central Committee of the Communist Party and the Council of Ministers of the Kazakh SSR.

Over the years of the Medical University's existence, its organizational form has undergone multiple changes, and the management system has been reformed in accordance with the requirements of the time. The main stages of the University's development:

1. Tselinograd State Medical Institute (1964-1997).
2. Kazakh State Medical Academy (1997-2008).
3. Joint-Stock Company "Kazakh Medical Academy", with 100% state participation in the authorized capital (13.05.2008-2009).
4. NJSC "Astana Medical University" (06.01.2009-01.07.2010) as part of JSC "National Medical Holding" (hereinafter - NMH).
5. NJSC "Astana Medical University" since 01.07.2010 is under the subordinate control of the Ministry of Health of the Republic of Kazakhstan.

Detailed information is available on the website of the university <https://amu.edu.kz/ru/about-university/>

Since February 22, 2019, based on the Resolution of the Government of the Republic of Kazakhstan "On the issues of establishing a non-profit joint-stock company "Astana Medical University" No. 648 dated October 16, 2018, the joint-stock company "Astana Medical University" was reorganized into a non-profit joint-stock company "Astana Medical University".

Currently, the University has a state license from the Committee for Control in Education and Science of the Ministry of Education and Science of the Republic of Kazakhstan dated March 19, 2019, No. KZ93LAA00014823, code 7M101 in the direction of training "Healthcare" for the right to carry out educational activities in postgraduate professional education, according to which it has the right to issue state-approved education documents. The University has a multi-level education system. According to the organizational structure of NJSC "AMU", the main structural divisions of the University are institutes, schools, departments, departments, divisions, centres, which include staff in the following categories: teaching staff, administrative and managerial personnel, educational and support personnel, service personnel.

NJSC "AMU" was the first among the medical universities in Kazakhstan to begin multi-level training of medical and scientific-pedagogical personnel (system of continuous higher education) in the following areas: bachelor's degree - internship - residency; bachelor's degree - master's degree - PhD doctorate.

This year the university was turned 60 years old, by this milestone Astana Medical University has many recognized achievements and in the future strives for recognition of the results of its activities at the highest levels.

The university has high achievements (educational, scientific, international) - constant improvement of the material and technical and educational and information bases of the university, professional level of resource support for the implementation of goals and objectives of the EP, constant professional growth of teachers of master's programs and others.

In the international rating QS Stars Rating System NJSC "AMU" for the first time in the Republic of Kazakhstan received a high rating - 4 "stars". This year, in addition to the overall rating of 4 stars, the university received ratings in individual categories: teaching - 5 stars, employment - 5 stars, research - 4 stars, global interaction - 3 stars, amenities - 3 stars, social impact - 3 stars, a special criterion - the strength of the educational programme "Medicine" - 4 stars, inclusiveness - 3 stars. In the prestigious world ranking of environmental sustainability of universities UI Green Metric World University Ranking-2024, which measures the commitment of universities to improving environmental infrastructure, as well as promoting sustainable development and environmental protection, in 2024 NJSC "AMU" entered the TOP-1000 best universities in the world and the TOP-12 Kazakhstani universities, and also became the first among medical universities in Kazakhstan to achieve these results. The UI Green Metric rating evaluates universities on a number of key sustainability criteria: efficient use of resources, reduction of carbon emissions, waste management, implementation of green technologies and practices, and development of environmentally friendly infrastructure. Presence in this rating demonstrates the university's commitment to the principles of environmental sustainability and responsible use of natural resources.

The research school coordinating and implementing the educational programme of the master's degree 7M10128 - "Biological Safety" is headed by PhD Raisova K.A.

2.2 Information on previous accreditation

Until now, accreditation of the educational programme 7M10128 - "Biological Safety" of NJSC "Astana Medical University" has not been carried out.

2.3 Brief description of the results of the analysis of the self-assessment report of the educational programme "7M10128 "Biological Safety" for compliance with the Standards for

accreditation of educational programmes for master's degree specialties in health care and conclusions on its completeness

The self-assessment report of the educational programme of the master's degree "7M10128 "Biological Safety" (hereinafter referred to as the report) is presented on 125 pages of the main text, annexes on 53 pages, copies or electronic versions of 143 documents located at the link https://drive.google.com/drive/folders/1bvK-N6_Hj_nNle9uik6Atj03IyWOUUjr

The report is characterized by the completeness of answers to all 9 main standards for accreditation and criteria, structuring taking into account the recommendations of the Guidelines for conducting self-assessment of the educational programme provided to the educational organization by the accreditation centre - ECAQA, as well as the internal unity of information. The report is accompanied by a cover letter signed by Acting Rector Koikov Vitaly Viktorovich, who confirms the accuracy of the quantitative information and data included in the self-assessment report.

The report contains a list of 22 members of the internal self-assessment commission indicating the responsibility of each employee. Self-assessment of the educational programme "7M10128 "Biological Safety" was carried out on the basis of the order of the rector of the university No. 838-n / k dated "12" September 2024 "On the self-assessment of the educational programme of the master's degree 7M10128 Biological Safety".

All standards provide the actual practice of the university in training master's students in the specialty "7M10128 "Biological Safety" taking into account the start of admission of students in 2024, substantiated data, examples of the implementation of the objectives of the educational programme, national and international events, methodological support, confirming compliance with the requirements of standards for accreditation. The description in the self-assessment report is quite complete and up-to-date in terms of the number of master's students, teachers, administration, information on selection and admission, training results, knowledge and skills assessment results, educational resources and practical training environment, practice bases, contractual obligations with partners (universities, associations), financial information, plans for the development and improvement of master's students' training and the timeliness of completing the dissertation research.

The report was submitted to the ECAQA in a completed form, written in literate language, the wording for each standard is clear and understandable and described in accordance with the criteria of the standards, the tables contain references in the text and have continuous numbering.

The quality of the self-assessment report served as the basis for moving to the next stage of the accreditation procedure - external evaluation. The experts planned to validate the report data, compare the information from the report with the information that will be obtained during a visit to the educational organization, i.e. verification of quantitative and qualitative indicators.

3. Description of the external expert evaluation

The external expert work within the framework of the evaluation of the educational programme "7M10128 "Biological Safety" was organized in accordance with the Guidelines for the external evaluation of educational organizations and educational programmes of the ECAQA and according to the program agreed with the rector of the NJSC "Astana Medical University" V.V. Koikov. Dates of the visit to the organization: December 12-13, 2024.

The external evaluation is aimed at validating the data of the self-assessment report and verifying the indicators indicating the degree of compliance with the criteria of standards for accreditation.

The sequence of the visit over 2 days is presented in detail in the Visit Program (hereinafter referred to as the program), which is in the documentation of the accreditation centre. The program is evidence of the implementation of all planned activities within the framework of the external expert evaluation.

To obtain objective information, the members of the EEC used the following methods and their results:

- interviews with management and administrative staff - 25 people;
- interviews with graduate students - 5 people;
- studying the website <https://amu.edu.kz>;

- interviewing 14 employees, 12 teachers, 3 scientific supervisors;
- surveying teachers and graduate students - 25 and 5, respectively;
- observing the training of graduate students: visiting training bases;
- review of resources in the context of fulfilling standards for accreditation: 3 training and research bases were visited, including the Department of Public Health and Epidemiology, the Department of Public Health and Hygiene, the Institute of Radiobiology and Radiation Protection;
- studying 93 educational and methodological documents both before the visit to the organization and during the visit to the departments (the list of documents studied is in **Annex 2**).

The staff of the accredited organization ensured the presence of all persons specified in the visit program and in the lists of interview sites and interviews (Table 1).

Table 1 - Information on the number and category of participants in meetings, interviews, and conversations with members of the EEC

№	Position	Quantity
1	Rector	1
2	Vice-Rector	2
3	Financial Director, Managing Director	2
4	Deputy Chairman of the Academic Council, Chairman of the Quality Assurance Committee (QAC) of the Master's and Doctoral Programmes	2
5	Head of HR, Head of the Centre for Transfer of Educational Technologies	2
6	Dean of the Research School, Head of the Centre for Planning and Development of Academic Affairs, Leading Methodologist of the Centre for Planning and Development of Academic Affairs, Head of the Registrar's Office, Chief Specialist of the Educational Process Quality Audit Group	5
7	Teachers	12
8	Master's students	4
9	Employers of graduates of accredited educational programmes	2
10	Representatives of practical healthcare	2
11	Master's graduates	5

On the last day of the visit to the organization, a meeting of the EEC members was held on the results of the external evaluation. A final discussion of the results of the external evaluation of the educational programme, examination of documents, interview results, and questionnaires was held. The EEC members began drafting the final report of the EEC. Generalizations of the external evaluation results were made. The experts individually filled out the "Quality Profile and Criteria for External Evaluation of the Educational programme "7M10128 "Biological Safety" for Compliance with the ECAQA Standards for accreditation". The EEC members made no comments. Recommendations for improving the educational programme were discussed and the chairperson D.S. Serikova-Yesengeldina held a final open vote on the recommendations for the ECAQA Accreditation Council for the accreditation period.

Comfortable conditions were created for the work of the EEC; access to all necessary information and material resources was organized. The commission notes the high level of the university's corporate culture, the high degree of openness of the team in providing information to members *While conducting a survey of graduate students, 100% rated the work of the External Expert Commission for accreditation of this organization as positive. 100% believe that it is necessary to conduct accreditation of an educational organization or educational programmes.*

According to 66% of teachers, the commission examines all the main processes of program implementation, which is useful for developing recommendations for improving the key areas of activity of the accredited educational organization, 16% partially agree, 8% partially disagree, 8% find it difficult to answer.

At the end of the visit, the chairman of the EEC announced recommendations for the management and employees of the educational organization based on the results of the external evaluation as part of the specialized accreditation.

4. Analysis of compliance with standards for accreditation based on the results of external evaluation of the educational programme of the master's degree "7M10128 "Biological Safety"

Standard 1: MISSION AND OUTCOMES

1.1 Statement of the mission, goals and final learning outcomes

The mission of the educational programme "7M10128 "Biological Safety" includes training specialists who are able to comprehensively solve problems in the field of biological safety and control, ensure conditions for biological safety of the population and individual components of the environment, within the framework of the sanitary and epidemiological well-being of the population, veterinary and sanitary safety, and a favourable phytosanitary situation in the Republic of Kazakhstan. The mission reflects the specifics of training personnel under this program and is formulated in accordance with the strategic directions of the University.

The mission of the EP is developed on the basis of the mission of the organization and the main regulatory documents (Law of the Republic of Kazakhstan dated July 27, 2007 No. 319-III "On Education" <https://adilet.zan.kz/rus/docs/Z070000319>; Code of the Republic of Kazakhstan dated July 7, 2020 No. 360-VI 3PK "On Public Health and the Healthcare System" <https://adilet.zan.kz/rus/docs/K2000000360>; State Program for the Development of Healthcare of the Republic of Kazakhstan for 2020-2025; State Program for the Development of Education and Science of the Republic of Kazakhstan for 2020-2025). The mission is presented in an accessible form for graduate students and employers (<https://amu.edu.kz/ru/about-university/>).

The final learning outcomes are defined in accordance with the learning outcomes reflected in the State Compulsory Educational Standard of the Republic of Kazakhstan (SCES RK) and are spelled out in the educational programme.

During the implementation of the program activities, namely, based on the results of the interview with the first head of the organization, members of the academic council, interviews with teachers, compliance with the criteria of **standard 1.1**, was established, since the final learning outcomes contain both theoretical knowledge and the formation of analytical thinking (through the discipline/module "Biological Safety and Labour Protection", "Biological Safety in Diagnostic Laboratories of Medical Organizations", "Legal Regulation of Biological Safety and Biological Protection", "Epidemiology of Particularly Dangerous Infections"), communication skills (through the discipline/module "Management", "Psychology of Management", "Foreign Language"). The educational programme formulates the goals of developing practical skills through mastering such disciplines as "Descriptive and analytical epidemiology", "Medical microbiology and modern methods of laboratory diagnostics", "Methods of sanitary and bacteriological research", "Biological safety and labor protection", "Biological safety in diagnostic laboratories of medical organizations", "Legal regulation of biological safety and biological protection", "Epidemiology of especially dangerous infections", "Ecological epidemiology and biological risk management", "Biological safety and disinfection", "Risk assessment for the environment, production environment and human health", "Biological safety in microbiological laboratories of medical and pharmaceutical facilities", "Safety of working with microorganisms of pathogenicity groups I-II", "Safety of working with microorganisms of pathogenicity groups III-IV and pathogens of parasitic diseases", "Strategy and tactics of combating antibiotic resistance and hospital strains", "Biotechnology of microorganisms", "Radioecology and biological risk management", "Intra-laboratory quality control of bacteriological studies",

"Technogenic contamination with radionuclides", "Principles of decontamination and disposal of laboratory waste".

The university applies ethical approaches in training master's students. The experts familiarized themselves with the code of ethics for students and teachers (approved on March 14, 2024). During a conversation with 5 master's students, the experts made sure that they knew about this document and applied it in their studies and communication with teachers and colleagues.

1.2 Participation in formulating the mission and final learning outcomes

The educational programmes implemented at the university are a set of regulatory documents developed on the basis of the state compulsory educational standard of the Republic of Kazakhstan and standard programs of disciplines approved by the Ministry of Health of the Republic of Kazakhstan. All interested parties are involved in the process of developing and discussing the mission of the EP. For this purpose, the University has collegial bodies, which include potential employers, students of all levels, as well as representatives of the University's Academic staff as members. All participants in the educational process know the mission of the educational programme "7M10128" Biological Safety ", took part in the formation of proposals for formulating the mission (clause 1.2). For example, teachers, a master's student participated with proposals - competencies and final learning outcomes of the EP, practical skills of a graduate, a catalogue of elective disciplines. A wide range of stakeholders makes it possible to more reliably assess the activities of the university and improve the process of continuous improvement in formulating the mission and goals.

The mission was approved at a meeting of the department (Minutes No. 7 dated 06.02.2022), the QAC of the EP of master's and doctoral studies (Minutes No. 7 dated 19.06.23).

Experts have established that the mission of the educational programme is communicated to applicants for a master's degree, undergraduates, and employers through the website, social networks, and information letters to medical organizations.

From interviews with undergraduates, it was established that before classes begin, teachers inform about the mission and work plans of the university, and tell them where to get the necessary information about the educational programme, teachers, and training bases.

During their visits to the university's departments, experts noted the strengths of the accredited educational programme, including: Status of a non-profit joint-stock company; Implementation of corporate governance principles (Board of Directors, Management Board); Formation of a corporate culture (Charter, System of Declared Values and Norms, Code of Corporate Culture and Ethics, Strategic Management, Corporate Awards System); Delegation of authority; Use of various management tools; Participation of employers in practical healthcare in the development of educational programmes.

The university has departments that are directly related to the educational programme of the master's degree "7M10128 "Biological Safety", which can be noted as the best practice in education, namely, the research school. This conclusion was made, since this department carries out admission and recruitment to the master's program, the formation of a state order for the EP, the selection and admission procedure, paid training, career guidance work, feedback with applicants and job seekers, work with departments, employment of graduates.

During the conversation with the master's degree students and employers, the experts received answers to the following questions: "Do you participate in formulating the mission and goals of the organization, educational programme?", "What is the personal contribution of the master's degree students to improving the educational programme?". The master's degree students answered these questions that they are members of the advisory bodies at the university, suggested observing the principles of student-centeredness, and the employers answered as follows that, according to their recommendation, the programs were focused on developing practical skills

1.3 Institutional autonomy and academic freedom

To verify **standard 1.3** a meeting was held with the rector of the university Koikov V.V., vice-rector, MBA of the Higher School of Public Health Saidangazin D.D., vice-rector, MD, professor, immunologist-allergist Gazalieva M.A. During the conversation, the experts asked the following

questions: Strategies for the development of postgraduate education at AMU; Justification for the development of new educational programmes in the master's program; Evaluation of educational programmes. During the answers, the rector and vice-rectors confirmed that MUA is constantly expanding the list of specialized master's programs, taking into account the needs of practical health care, educational programmes are constantly evaluated at all levels. The projectors confirmed that all stakeholders participate in the development of the mission and final results of the EP, the discussion begins at the department meeting level. The university has developed its own Syllabus form. In addition to the EP itself, the Syllabus, the WC, there is a catalogue of elective disciplines (CED), which contains a description of the elective disciplines available for choice by master's students.

The university has autonomy in the development of educational programmes, including the master's program in the specialty "7M10128 "Biological Safety". The program was developed by the staff of the Department of Public Health and Epidemiology, reviewed and approved at the department meeting No. 7, dated 06.02.2022.

The program development process is regulated by the university standard "Educational programmes: development and updating" (approved on 13.08.24).

The elective components were developed taking into account the opinions of graduate students and representatives of practical healthcare. For example, the elective on the topic "Methods of Scientific Research" 4 credits, was developed due to the need for the graduate student to conduct statistical processing of the material.

When choosing a base for practical training, the choice was made in favour of the laboratory at the Astana National Laboratory (ANL). A memorandum was signed with NU, the partner university has an accredited laboratory, the graduate student is specialized, worked there before admission, plans to continue working there and apply his knowledge and competencies (agreement with the base dated 19.06.23). Graduate students are provided with all the necessary resources to prepare a dissertation (library, access to international databases - see more in Section 6.). There is the necessary teaching staff of 9 people in order to maintain the ratio - teacher: graduate student, as 1:6.

1.4 Program Title and Description

The results of the documentation study demonstrate that the mission of the organization and the mission of the educational programme "7M10128 "Biological Safety" and the educational process are built in accordance with the State Compulsory Educational Standard and current LSI in postgraduate education and health care. At the same time, during meetings with teachers, a master's student, and administrative and managerial personnel, the experts identified a number of problems, including: internships should be carried out on the basis of a laboratory for especially dangerous infections, to connect theory and practice, and the involvement of biosafety specialists in the staff.

The experts studied 93 documents, including those directly related to the accredited master's program (see Annex 3 to this report).

To implement the educational programme in the specialty "7M10128 "Biological Safety", the organization's documents contain teaching and methodological complexes, which define the goal, take into account the integration of practical and theoretical components, and independent work. Compliance with the State Compulsory Educational Standard and standard requirements has been established.

Information on teaching methods in the Master's program is provided, including the possibility of creating an individual training program if necessary. This is regulated in the Regulation "On training in the Master's program" PL-AMU-121-23, which is available to each student through the official website of the university <https://amu.edu.kz/upload/iblock/e35/e35cbf90ba682b2ef2e7e16b121b430f.pdf>. The document "Academic Policy" (minutes No. 17 of August 21, 2024) describes the assessment policy, conditions for extending studies in the Master's programme (for example, in case of long absences for a valid reason by the student), requirements for the design of the dissertation. RI AMU 18-24 protocol No. 20 of August 19, 2024 on the completion of the final work.

The system of support for master's students is described in the "Academic Policy" (minutes No. 17 dated "21" August 2024).

The policy for detecting plagiarism is included in the "Regulations on the use of an automated system for detecting plagiarism and checking texts for borrowing" (Protocol No. 23 approved on August 22, 2023). The principles of academic honesty are described in the document Code of Academic Honesty (Protocol No. 18 approved on August 23, 2024).

The conditions for selection and admission of a master's student are contained in the document: Process Map "Management of the process of selection and admission of students to the master's programme" KP-AMU-EP-28-23 (approved on 12.07.23), as well as the procedure for admission to the master's programme are in the "Rules for Admission to the Master's Programme of NJSC "Astana Medical University" PR-AMU-04-24 (approved on 9.08.24)

The procedure for filing complaints and applications from master's students is included in the document "Academic Policy" (approved by the decision of the Board of NJSC "Astana Medical University", minutes No. 17 dated "21" August 2024).

The experts are familiar with the approved Policy for Ensuring the Quality of Education (minutes No. 27 dated December 2024).

The procedure for informing master's students about their rights and obligations is reflected in the Regulation on Master's Degree Studies (minutes No. 16 dated June 29, 2023) and in the document Academic Policy of the University. The AP was approved by the decision of the Board of NJSC "Astana Medical University", minutes No. 17 dated August 21, 2024.

During a visit to the university and an interview with the Dean of the Research School Raisova K.A., the commission was convinced that there is a documentation system that is transparent and accessible to all teachers and employees, and includes such documents as annual operational plans, annual reports, department regulations, agreements with teachers and master's students and educational and methodological documentation (work program, working curricula, syllabuses, journals), assessment tools (checklists, statements), certificates, and verifications. A review of the website showed that the documents necessary for master's students are posted on its pages. The conditions for the selection and admission of a master's student are contained in the document: Process Map "Management of the process of selection and admission of students to the master's programme" KP-AMU-EP-28-23 (approved on 12.07.23), as well as the procedure for admission to the master's programme are in the Rules for Admission to the Master's Programme of NJSC "Astana Medical University" PR-AMU-04-24 (approved on 09.08.24), the code of academic integrity K-AMU-01-24 Approved by the decision of the Board of NJSC "Astana Medical University" No. 18 dated "23" August 2024 and there is information on updating the educational programme.

The developed LSI of the AMU guarantee high-quality support of the EP, all documentation for the support of the teaching staff implementing the master's degree program, as well as the student, is approved and is carried out in accordance with the Regulations, work instructions and standards of NJSC "MUA" (documents are available online on the university platform in the "Employee" or "Student" sections <https://amu.edu.kz/ru/sotrudnikam/polozheniya/>).

The experts reviewed the strategic plan for the development of the University for a Period of 5 years (2022-2026), which includes 5 areas, including the direction for the development of postgraduate education: "Training competitive and professionally competent healthcare specialists in popular specialties and specializations." According to experts, this confirms the implementation of standard for accreditation and demonstrates the goals, objectives and prospects of the university.

While conducting a survey of 5 master's degree students (on the resource <https://webanketa.com/>), out of 22 questions, a number were devoted to the quality of the educational process and the educational programme. It was found that 100% of master's degree students would recommend studying at the university to their acquaintances, friends, and relatives. And 100% of respondents believe that the heads of the educational programme and teachers are aware of the problems of students related to training. To the question "Do you think the university allows you to acquire the

necessary knowledge and skills in your chosen specialty?", 100% of master's degree students answered positively

The 25 teachers surveyed (question 25 of the survey) also answered that 88% of the teaching staff are satisfied with the organization of work and the workplace at the university, and 4% partially agree with this statement, 4% - no answer. The experts determined that the university has a healthy microclimate, since the head is quite accessible to both master's degree students and employees, responds promptly to applications and suggestions. In the questionnaire, 92% of teachers are satisfied with the microclimate at the university, and 4% are partially satisfied. According to 88% of respondents, they have the opportunity to realize themselves as professionals in their specialty. Teaching experience of up to 5 years is 12% of teachers, up to 10 years - 8%, over 10 years - 80%.

Conclusions of the EEC by criteria. Comply with 5 basic standards: fully - 5, partially - 0, do not comply - 0.

Recommendations for improvement:

- 1) To include in the catalogue of elective disciplines the study of the discipline "Especially dangerous infections" on the basis of the Department of Infectious Diseases and Clinical Epidemiology.

Standard 2: EDUCATIONAL PROGRAMME

2.1 Methods of learning and teaching

For the effective implementation of the Master's programme in the specialty "7M10128 "Biological Safety" at the Department of Public Health and Epidemiology, the following teaching methods are used: Essay; AI - assessment interview; MCQs (test questions with multiple choice Multiple Choice Questions); MSF— Multi-Source Feedback; OR - Oral report (presentations, reports); SCL- small group learning; SAQ - Short Answer Questions; OE - Oral examination.

The choice of these teaching methods is due to the fact that it allows graduate students to develop the skills of working with primary sources, mastering the skills of independent oral presentations, substantiating and defending their own point of view. Master students are taught the skills of conducting a discussion and the ability to listen to a partner.

The University organizes training for Master's students on practical bases, where they form and develop such practical skills as (applied teaching and assessment methods: PBL, CBL, TBL, interactive teaching methods, etc.); communication skills (applied teaching and assessment methods: Kolb model, etc.); scientific research skills (applied teaching and assessment methods: analysis from the standpoint of evidence-based medicine, Project-based learning); general education (development of language competencies) - all technologies, distance learning technology KAHOOT; economic and organizational-managerial (applied teaching and assessment methods: analysis through brainstorming, e-learning, updating of IWS with a focus on the future specialty).

Master's students collect prospective and retrospective information in order to complete writing the dissertation.

The experts did not attend practical classes, since the classes were completed; the Master's student was on practice. The organization ensures compliance with ethical aspects in the implementation of the educational programme, since the experts studied the code of corporate ethics and culture (dated September 28, 2012) and during the interview, the graduate students responded that they were informed about the content of this document.

In a conversation with the graduate students, the experts saw that the university promotes the development of practical competencies of graduate students, including research. At the same time, graduate students deepen their theoretical knowledge and develop communication skills.

The training of graduate students in the specialty "7M10128 "Biological Safety" (specialized direction) is aimed at meeting the needs of practical health care, since the analysis of the shortage of specialists revealed a shortage of specialists in the corresponding profile. Therefore, the university provides a lot of opportunities and conditions for qualified training of specialists in this field. Thus,

during a conversation with the Dean of the Research School Raisova K.A. the experts received the following information: training of masters in this specialty is in demand, since the order came from the employer, and the teachers confirmed that the training of master's students is carried out in accordance with the rules and regulations. Master's students in this specialty can work in the field of epidemiological safety management of organizations, personnel, production processes on an organizational scale.

Of the 5 surveyed master's students, 100% of students responded that teachers use active and interactive teaching methods in classes quite often. When visiting the university, the experts identified problems in the implementation of new teaching methods.

2.2 Development of academic skills

The experts received evidence that the educational programme develops academic skills in master's students, including independent thinking, analytical skills, critical thinking, and decision-making skills. During the interview with the master's degree students, the experts came to the conclusion that the master's degree students reason competently, are capable of critical perception of information and have the communication skills necessary for a scientist-teacher-healthcare specialist. For example, the experts asked the following questions: What university resources do you use when writing articles? The master's degree students answered: The University provides all the resources, including access to international databases.

The experts familiarized themselves with the individual work plan of the master's degree student (IWP) for the accredited program. The individual work plan is drawn up for the entire period of study, which includes the following sections: educational programme of the master's degree; plan for the implementation of the master's project (topic, supervisor, relevance, goal, objectives, experimental research work, materials and methods of research, novelty of the study, expected results, practical significance, research base, calendar deadlines for completing the work); general plan for working on the master's project (theoretical work, experimental work, presentation of results).

The IWPM structure was developed by the research school and approved by the Decision of the Board of NJSC "AMU" dated June 29, 2023, No. 16.

Teachers provide master's students with methodological and didactic materials, additional literature to prepare for classes, with which 100% of master's students are fully satisfied.

2.3 Program content, scope

There are documents containing requirements for the content of educational programmes. The person responsible for the EP is responsible for the selection and implementation of innovations in the educational process.

Each topic of the master's program includes basic and advanced theories and models, such as a competence-oriented approach, which is a unified system for defining goals, selecting content, organizing the process of training a specialist based on the allocation of special, general and key competencies that guarantee a high level of effectiveness of the specialist's professional activity. The EP contains a list of general and special competencies, the achievement of which is ensured through the study of disciplines, industrial practice, and experimental research work.

The content of the work programs and the catalogue of elective disciplines reflect the needs of the healthcare system, such as a competency-oriented approach, which is a unified system for defining goals, selecting content, organizing the process of training a specialist based on the allocation of special, general and key competencies that guarantee a high level of effectiveness of the specialist's professional activity, as well as the specifics of R&D and scientific achievements of teachers. These include publications in cited publications of the near and far abroad, journals recommended by the Committee for Control in the Sphere of Education and Science, and presentations at international conferences.

While developing the master's programme, the developers relied on professional medical literature, including their own experience as scientific supervisors.

The interviewed teachers responded that they were 100% fully satisfied with the level of previous training of master's students.

The experts established a clear continuity between the final results of the previous training of master's students (prerequisites) and training in the master's program, as well as subsequent programs of continuous professional development. The university has developed 17 additional education programs, including for the specialty "7M10128 "Biological Safety". Master's students are informed about this.

88% of teacher-respondents believe that university students have a high level of knowledge and practical skills after completing the training program, 8% partially agree with this, 4% - no answer.

Healthcare organizations that facilitate the collection of the necessary material during research work act as practice bases. Among them, the following can be distinguished: MSE on the REM "City Polyclinic No. 9"; MSE on the REM "City Children's Hospital No. 8"; State Institution "AIDS Prevention and Control Centre"; RSI "Department of Consumer Rights Protection of Nur-Sultan of the Committee for Consumer Rights Protection of the Ministry of National Economy of the Republic of Kazakhstan"; RSI "Department of Consumer Rights Protection of Nur-Sultan of the Committee for Consumer Rights Protection of the Ministry of National Economy of the Republic of Kazakhstan"; State Enterprise "Centre for Sanitary and Epidemiological Expertise of the City of Nur-Sultan" SEC MOH RK, etc.

The terms of industrial practice are determined by the State Compulsory Educational Standard of the Republic of Kazakhstan, an individual work plan, determined by the curriculum. The content of industrial practice is determined by the topic of the master's project.

To the question of the questionnaire "Evaluate the organization of clinical (practical) training", "Is there sufficient time for practical training (patient supervision, etc.)" 100% of master's students answered excellent. At the same time, 100% of master's students claim that after the end of classes, the teacher provides feedback (listens to your opinion, conducts a mini-questionnaire, works on mistakes).

2.4 Research and grants

Analysis of educational activities showed that the scientific basis and all scientific achievements in the relevant disciplines are taken into account, additions are made to the bibliography of the teaching and methodological complex and syllabuses, and teachers use them in the classroom.

The educational programme includes scientific foundations and methodology of medical research (elective "Methods of Scientific Research", 4 credits), including clinical research and clinical epidemiology. During a conversation with master's degree students, experts learned that they use scientific data in their studies and know the basics of evidence-based medicine. The teachers said that they teach master's degree students methods of critically evaluating literature, articles and scientific data, and the application of scientific developments.

The department implements 4 scientific and technical programs (STP), the results of which can become the basis for the research practice of master's degree students. For example, the topic of the master's project is "Assessment of the long-term dynamics of especially dangerous infections in the Akmola region". Specialty: 7M10128 - "Biological Safety". Supervisor: MD, Professor Tashmetov K.K., Leading Biosafety Specialist of the NCE SEC MOH RK Akmola Region. Scientific Advisor: MD, Professor Musina A.A.

While surveying master's students, it was found that the university has access to student participation in research work and 100% of people are completely satisfied with this. Master's students should be engaged in R&D and in response to the questionnaire, 100% wrote that they are already engaged in R&D.

2.5 Structure and Duration of the Programme

The academic year in the master's program consists of academic periods - 2 semesters, 15 weeks each, a period of midterm certification / final control, practices, end-of-course assessment and vacations. The duration of the program is 1800 hours. The academic year begins in September and ends in June. The duration of training in the program "7M10128 - "Biological Safety"" is 1 year with the mastering of disciplines with a total volume of 60 credits. At the same time, during one semester, a student masters at least 30 academic credits (one academic credit corresponds to 30 academic hours). Training in the master's degree program is carried out only in full-time form.

Theoretical training includes both basic disciplines and specialized disciplines. In turn, basic and specialized disciplines contain a compulsory component and optional components. The cycle of basic disciplines (foreign language, management and psychology of management) is 16.7% of the total volume of the educational programme, of which 60% is allocated to the university component and 40% to the optional component. The volume of the cycle of 16 specialized disciplines is 41.7%, of which 60% is allocated to the university component and 40% to the optional component. A cycle of core disciplines, each of which includes 4 disciplines of the university component and 12 disciplines of the elective component (<https://amu.edu.kz/upload/iblock/533/5339c8a487eee4222bdd3c98a21d7e0d.pdf/>). Elective components are developed by departments and are based on the demand of the labour market, the needs of students and modern scientific achievements. 67% of the EP contains disciplines of the elective component, allowing future master's students to choose the focus of their specialization and gain knowledge of modern concepts and theories in the field of managing the epidemiological safety of organizations, personnel, and production processes on an organizational scale.

The programme describes approaches to formative (current) and summative (final) assessment of a master's student. Feedback from master's students is carried out regularly and includes the following issues: teaching effectiveness, use of innovative teaching methods, satisfaction with the educational process, providing feedback; how relevant are the topics taught. A survey of master's students has not yet been conducted in this specialty.

Upon completion of the training, the master's student is awarded a diploma and the qualification of Master of Health in the educational programme "7M10128 "Biological Safety", which corresponds to level 7 of the European Qualifications Framework, the requirements for completing the programme.

The procedure for extending and interrupting training is described in the Academic Policy. This was not used during the reporting period.

For the successful implementation of the educational programme in the specialty "7M10128 "Biological Safety", the organization has resources to organize the assessment of the practical skills of master's students ((All information on the assessment policy, assessment methods, including assessment criteria, exam passing criteria, weight and criteria for student progress, appeal procedure, number of permitted retakes and conditions for retaking the exam is contained in the "Academic Policy").

Practical training of master's students is carried out in the conditions of such medical organizations as the laboratory in Astana National Laboratory (ANL), with which a memorandum was signed. This ensures that master's students acquire skills in various aspects (research, management, and teaching) of the chosen field of health care.

2.6 The process of developing an educational programme

The management of the educational process, reflected in the self-assessment report (standard 2) and general approaches to management were confirmed during a visit to the office registrar's department, departments. At the same time, verification of standard 2 showed that the accredited educational programme is being implemented according to the approved plan.

The experts got acquainted with the work of the departments and councils involved in the development of the educational programme of the Master's degree "7M10128 "Biological Safety", including the program implementers. A total of 5 meetings were held and cross-interviews revealed that all interested parties took part in the development of this educational programme, and their opinions were fully taken into account (both employers and students).

The process of developing an educational programme includes an assessment of the needs for specialists (for example, the need for graduates of the program "7M10128 "Biological Safety" is available according to the employment department), and the cost of training is 1,122,000 tenge

The master's program was developed at the Department of Public Health and Epidemiology and approved at a meeting of the Academic Council. The master's program was reviewed by Tashmetov K.K., MD, specialist in BB NCE in Akmol region, professor of Kokshetau University named after A. Myrzakhmetov and Kitarova Z., specialist of the Department of Strategic Development and

International Cooperation CSEC MOH RK. The reviewers noted that the educational programme 7M10128 "Biological Safety" fully complies with training standards and is written at a high level. The review focuses on the fact that the implementation of the training program takes into account the topics of master's projects, which should include current problems of the BB of the regions of Kazakhstan. Thus, the experts analysed the hierarchy and sequence of development and approval of the master's program.

The following recommendations were made during the development of the master's program: employers gave recommendations in terms of focusing the program on the development of practical skills, new approaches to training based on best practices, which the department took into account when finally approving the master's programme.

However, there are difficulties in completing foreign internships, since they are not provided for in the training of the master's student.

At the same time, to the question "Do representatives of master's students participate in the development of educational programmes?", the experts received the following answer that students are members of advisory bodies.

The surveyed master's students are fully satisfied with the schedule of classes (100%).

Conclusions of the EEC by criteria. Compliant with 21 standards (including 19 basic, 2 improvement standards): fully - 20, partially - 1, do not comply - 0.

Recommendations for improvement:

- 1) To undergo an internship in a laboratory of especially dangerous infections.
- 2) To prepare a teaching aid on biosafety.
- 3) To introduce the practical skill "Rules for the use of PPE".
- 4) To update the list of references, use electronic resources.

Standard 3: ASSESSMENT OF MASTER'S STUDENTS

3.1 Assessment methods

NJSC "AMU" has defined the basic principles, methods and policy for assessing master's students, which are set out in the following internal regulatory documents: "Academic Policy of AMU" (minutes No. 17 dated 08/21/2024), "Regulations on the current monitoring of academic performance, midterm and final certification of master's students of NJSC "AMU". The documents specify the principles and methods used to assess master's students, including criteria for admission to exams, the number of exams, and the number of permitted retakes. The choice of certain methods for assessing master's students is based on the specifics of the disciplines and depending on the competence/learning outcomes that the discipline forms. The methods and forms of assessing the final learning outcomes are determined by the educational programme and are updated in accordance with the university standard "Model for evaluating educational programmes", approved by the decision of the Board of Directors dated 12.01.2024.

In order for the results of the assessment of master's students to be available to external experts, they are posted in the automated Platonus system, which is accessible to teachers, students, employees of the Research School, the Registrar's Office, etc.

Teachers enter grades of midterm and final assessments in the electronic journal in accordance with the instructions "On maintaining an electronic journal of academic performance" RI-AMU-59-22. The final grades of each academic period are reflected in the examination and summary reports generated in the AIS "Platonus". The summary reports are sent to the Research School by the Office Registrar to record credits for all students. Paper copies signed by the head of the Office Registrar are stored in the Research School, and electronic reports are in the AIS "Platonus", which are accessible to the employees of the Office Registrar.

The objectivity and transparency of grades and the process of assigning grades is ensured through the AIS "Platonus".

The study of control and measuring tools (tests, situational tasks, checklists) showed that the university has implemented an appropriate assessment policy that allows for a comprehensive assessment of the academic achievements of graduate students. During the interview, graduate students talked about the forms of assessment, what the daily assessment during the practical lesson consists of, that they are satisfied with everything. They also receive regular feedback from teachers.

The system of appealing the assessment results is reflected in the document "Academic Policy" and during the period of work of the educational organization there were no precedents of appeal. To verify the data of standard 3, the experts asked the head of the postgraduate education department questions: *How is the academic performance of master's students monitored? Are current grades posted daily? and checked the documents and methods for assessing master's students.* To implement the procedures for monitoring academic performance and midterm assessment of students, departments create control and measuring tools (CMT). CMT allows assessing the degree of achievement of the learning outcomes planned in the EP and the level of competence development. When developing assessment methods and formats, such criteria as validity, reliability, acceptability and effectiveness are taken into account. They are formed on the basis of key assessment principles: validity, reliability, objectivity.

The end-of-course assessment (exam) is conducted after completion of the discipline during the examination session (midterm assessment) in accordance with the working curriculum and the academic calendar. The learning outcomes of master's students are assessed during practical classes by posting grades in the Platonus AIS. CMT are available for all disciplines provided in the EMCD. CMT are reviewed by internal experts. The heads of departments responded that additions and updates to the CIS are planned to be made annually when updating the syllabuses.

3.2 Assessment System

The assessment of academic skills corresponds to the master's level, since such teaching methods as utility are used, which include validity, reliability, acceptability and effectiveness. The developed assessment criteria are valid (the objects of assessment correspond to the set goals of the academic discipline); developing (they allow us to record what students can do and how they can improve their results); fair (all students have equal opportunities to succeed); reliable (uniform agreed criteria or standards are used); effective (feedback is feasible, but does not take much time from teachers and students); timely (feedback is constantly maintained).

The assessment methods and results avoid conflicts of interest, as they are based on the following important principles: - planned: analysis and assessment are not carried out spontaneously, but in compliance with a certain plan (according to the calendar-thematic plan of disciplines; systematicity and systematization: analysis and assessment must correspond to the structural components of the content of the material being studied and be constant (rating system); objectivity, which is ensured by a 100-point assessment (there are criteria for each assessment); openness and transparency: students know their grades, which stimulates them to increase activity; taking into account the individual capabilities of each student: knowledge, skills, and abilities of each are tested; unity of requirements: taking into account national standards for the content of education in accordance with the qualification characteristics of the 7M10128 "Biological Safety" programme.

The assessment system for master's students includes the principles of anti-plagiarism and academic honesty (academic policy of NJSC "AMU" P-AMU-17-24), which includes the Rights and obligations of participants in the educational process within the framework of the academic honesty, as well as responsibility of participants in the educational process. To ensure transparency and fairness in assessing students' knowledge, the university has a structural unit called the Educational Process Quality Audit Group. It is responsible for organizing independent examinations, centralizing end-of-course assessment in all disciplines in accordance with the established exam schedule

Experts inspected resources for organizing the assessment of knowledge and practical skills, namely, the Platonus AIS.

The interviewed employer representatives also pointed out the compliance of graduates' training with the modern development of medical practice and science, since, according to them, the university

is a "forge of personnel" for practical healthcare. Employers believe that they would like to see the strongest skills in graduates of the master's degree program, who are able to comprehensively solve problems in the field of biological safety and control, ensure conditions for biological safety of the population and individual components of the environment.

At the same time, there are difficulties in developing control and measuring tools, including solving applied problems.

3.3 Feedback from Master's students

Experts received information that each Master's student provides feedback through individual and detailed written feedback after formative and summative assessments. Feedback questionnaires for Master's students have been developed, and surveys are conducted regularly after completing each discipline. Monitoring the achievement of final results by students allows for an analysis of the survey results at all levels: department, QAC, AC, SC, vice-rector for academic activities, to identify strengths and weaknesses, and take appropriate measures to improve the educational process.

3.4 Quality assurance of the assessment system

The organization evaluates the reliability and validity of assessment methods using developed and approved assessment criteria.

During a visit to the university, the management was asked the question: "Are external examiners involved in order to improve the fairness, quality and transparency of the assessment process?" And the answer was received that external examiners are involved in the final state certification.

While interviewing 25 teachers regarding assessment methods, experts received convincing information that the transparency of grading is observed. Master's students also shared their opinions on the timeliness of providing tests, conducting consultations before exams, the clarity of the entire assessment procedure and its fairness. For example, master's students said that teachers are always available for consultations, even outside the approved schedule.

Conclusions of the EEC by criteria correspond to 10 basic standards: fully - 10, partially - 0, do not correspond - 0.

Standard 4: MASTER'S STUDENTS

4.1 Admission and selection policy

The organization has a policy for the admission of master's students, which is called "Rules for Admission to the Master's Program" <https://amu.edu.kz/upload/iblock/cc6/cc6b818f460b686171afa18888430eb2.pdf> and includes: requirements for admission to master's programs, the procedure for admission to master's programs, the procedure for conducting entrance examinations, admission in master's programmes. The rules are posted on the university website.

The dean of the Research School is Raisova K.A., the head of the Admissions Committee Zhilkibaeva K.T., the technical secretary of the Admissions Committee for the EP Master's and Doctoral Studies Amerseyitova F.T. spoke about the policy for the admission of master's students.

The selection and admission policies fully comply with the current legislation and the University Charter. The admission rules have been approved by the University Board. In 2024, the first admission to the specialized master's program in the specialty "7M10128 "Biological Safety" was carried out. Thus, the experts validated the data according to standard 4. In general, all the criteria are met, at the same time; some shortcomings in terms of career guidance work on recruiting students for this program were identified. The experts familiarized themselves with the documentation for the admission of master's students. The submitted documents were drawn up at the proper level. Regarding the practice of academic counselling, personal support for master's students and the development of not only professional skills, the experts interviewed the dean of the research school Raisov K.A., who replied that students can contact the head of the research school, the supervising vice-rector and the blog of the Chairman of the Board - Rector on all issues of interest. Each student within the framework of the EP, together with the academic supervisor, draws up an individual work plan, determines the list of elective disciplines. The topic is selected taking into account the relevance of the issues within the research areas of the department.

Regarding the practice of academic counselling, personal support for graduate students and the development of not only professional skills, the experts interviewed teachers. The organization has a process of individual planning of training and development of a graduate student in the form of the formation and implementation of an Individual Work Plan for a graduate student. https://drive.google.com/drive/folders/1iEqEJ2_ezKtCV3PII7Dk6SovZv0fjSoI

According to the Order of the Minister of Science and Higher Education of the Republic of Kazakhstan dated July 20, 2022 No. 2 "On approval of state mandatory standards of higher and postgraduate education" and the Regulation on training in the master's program PL -AMU-121-23, a graduate student studies on the basis of an individual work plan, which is drawn up under the guidance of a supervisor.

An individual work plan for a graduate student is drawn up for the entire period of study, which includes the following sections:

- Educational programme of master's training;
- Plan for completing a master's thesis/project (topic, supervisor, relevance, goal, objectives, research work, materials and research methods, scientific novelty, expected results, practical significance, research base, calendar deadlines for completing the work);
- General plan for working on a master's thesis/project (theoretical work, experimental work, presentation of results).

The University has a helpline that operates continuously and is one of the important types of socially significant services. Master's students are included in such advisory bodies as the Academic Council, the Academic Council, the Committee on Academic Coordination, at whose meetings they participate in monitoring and evaluating educational programmes by studying and analysing their content, as well as analysing reports on the results of a survey among students and graduates of the master's program, employers.

4.2 Recruitment of master's students

The University has implemented a policy and process for the admission of Master's students based on their previous achievements, principles of equality and objectivity. The policy and criteria for admission to the University's Master's programs are regulated in accordance with: The Law of the Republic of Kazakhstan "On Education"; The Law of the Republic of Kazakhstan "On Science"; The Order of the Ministry of Education and Science of the Republic of Kazakhstan dated October 31, 2018 No. 600 "On Approval of the Standard Rules for Admission to Educational Organizations Implementing Educational programmes of Higher and Postgraduate Education" (hereinafter referred to as the Standard Rules for Admission); The current legislation of the Republic of Kazakhstan and local acts of the University. The University has defined and implemented the "Rules for Admission to the Master's Programme"

In 2024, one Master's student was admitted to the specialty "7M10128 "Biological Safety". The procedure for admitting master's students with disabilities to the master's programme "7M10128

"Biological Safety" is carried out in accordance with the Law of the Republic of Kazakhstan dated July 27, 2007 No. 319-III "On Education" observing the principle of accessibility of education at all levels for the population, taking into account the intellectual development, psychophysiological and individual characteristics of each person, the practice of admitting master's students with disabilities in accordance with the current laws and regulatory documents of the Republic of Kazakhstan is described. Internal LSI regulates inclusive education Regulation on inclusive education 08/31/2023. During the reporting period, master's students with special needs were not admitted.

4.3 Support and counselling for master's students

For all questions of interest, students can contact the head of the RS, the supervising vice-rector and the blog of the Chairman of the Board - Rector. Each student within the framework of the EP, together with the academic supervisor, draws up an individual work plan, determines the list of elective disciplines. The topic is selected taking into account the relevance of the issues within the research areas of the department.

All the necessary information, including: class schedule, academic calendar, point-rating system, announcements, regulatory documents, reference book - master's student guide is posted on the University website (<https://amu.edu.kz/ru/poslevuzovskoe-obrazovanie/magistratura/magistratura-dlya-obuchayushchikhsya/raspisanie-zanyatiy/>). This ensures equal access of students to the necessary information, regardless of nationality, religion, country of residence, socio-economic status.

At the University, in order to serve all categories of students, teachers and employees of the University in order to optimize and automate processes in the field of providing services on the principle of "one office", minimize corruption risks, transfer paper services to electronic format, the Service Centre "e-University" was created.

The University has a helpline, which operates continuously and is one of the important types of socially significant services.

Other types of support for master's students include the following: a service for organizing advisory, psychological, social, legal, financial, and medical support for students (instructions for students on career planning and development dated October 31, 2022, regulations on the centre for social and educational work dated July 17, 2024).

While talking with master's students, experts received evidence that they are provided with academic, financial (including assistance with publications and participation in conferences) and psychological support through the research school.

4.4 Representation of master's students

Master's students are included in the work of advisory bodies to participate in the development, management, and evaluation of educational programmes, as well as other issues related to master's students.

4.5 Requirements for graduates

Requirements for master's students regarding the program completion (projects, dissertations, internships, portfolios, transcripts, etc.) are described in the document "On training in the master's program of NJSC "AMU" PL-AMU-121-23". The execution of an individual work plan for a master's student is carried out in accordance with GOSO-2-22.

The experts were shown evidence of the development of research and critical analysis skills in master's students during the interview.

4.6 Progress indicators and reasons for lagging

Requirements for the progress of a master's student are described in the individual work plan of each master's student and approved by the dean of the research school. The form of current, midterm and final assessments is established by the department depending on the specifics of the discipline, which is subsequently approved by the Academic Council. Current and midterm assessments can be carried out in the form of colloquiums, test surveys, written tests, oral surveys, assessment of students' participation in debates, round tables, business games, solving situational problems, etc.

In the presence of academic debt and/or failure to complete a dissertation within a certain time frame, the university has developed a document "Academic Policy" to anticipate such situations and help the graduate student overcome them.

The academic performance of master's students is recorded by the division - the Department of Public Health and Epidemiology

Conclusions of the EEC by criteria. Comply with 12 basic standards: fully - 12, partially - 0, do not comply - 0

Standard 5: ACADEMIC STAFF

5.1 Selection policy

Total staff is 12, including 9 full-time teachers, 3 part-time. The experts are familiar with the university's personnel policy for the selection of faculty, approved by the Board's decision No 21 dated 08.08.2023. <https://amu.edu.kz/upload/iblock/980/980e7a056096531d0d29bbfed5b69ce7.pdf>. by order of NJSC "AMU" No. 660-n/κ dated 04.07.2024 "On approval of qualification requirements" for the positions of research associates and Academic staff of departments and research institutes (Annex 1, 2 <https://drive.google.com/drive/folders/1KYx9Pru8dSStv0MiNlc3COzKh9-WYMAZ>). To ensure the quality of training in the master's programme, requirements for personnel are determined in accordance with PL-AMU-121-23 dated 23.06.23 (section 6.6), as well as requirements for scientific supervisors (section 6.7) (https://drive.google.com/drive/folders/1Tjc_5y7agIPRbfMOkYx_rprxMm-ESLrL). The procedure for holding the competition is strictly regulated by the internal Rules for the competitive replacement of positions of faculty and research staff of NJSC "AMU", which are available for review PR-AMU-20-18 (https://drive.google.com/file/d/1zbaFsnLktYRAwD2cCCHv-CK-HM1mryy9/view?usp=drive_link). External experts received the opinion of teachers on the personnel policy, which includes procedures for the hiring, registration, dismissal of faculty and employees. The conversation with the head of the Department of Public Health and Epidemiology Musina A.A. included such questions as how personnel are selected to teach in the specialized master's programme, allowed the experts to learn about the requirements for the faculty: the presence of an academic degree, academic title, as well as published scientific papers in the field of hygiene, occupational hygiene, etc. Problems with human resource management and development were also identified, since biosafety specialists are not hired for part-time work...

While questioning teachers, it was found that the majority (92%) completely agree with the organization of work and the workplace at the university, but 4% partially agree, 4% partially disagree. At the university, teachers have the opportunity to do research and publish the results of R&D - 84% completely agree, 12% partially agree, 4% - no answer. Satisfied with the work of the HR service - 72% completely agree, 16% partially agree, 8% - completely dissatisfied, 4% - doubt the answer. Satisfied with the salary - 60% agree, 12% disagree, 12% - no answer, 16% - rather yes than no.

5.2 Commitments and staff development

During the meeting with the head of the HR department and during interviews with teachers, the experts received information about approaches to developing the pedagogical competence of teachers, motivation to work with master's students, and implementation of scientific supervision, which includes additional payment for supervising master's students.

The experts received answers about the program for advanced training of teachers, which is held annually. Conducting training and advanced training of the Academic staff at the University is carried out in accordance with the Program for the Development of the Academic Staff of NJSC "AMU" and the annual plan for advanced training of the Academic staff of the University. All faculty undergo advanced training in the pedagogical area (Teaching and assessment methods integrated into the curriculum, Methodology for developing and assessing test questions in higher medical schools, Active RBL technologies in medical education, Practical application of innovative RBL technology, Active PBL and TBL technologies in medical education, Active CBL and TPCBL technologies in

medical education, Methodology for developing a clinical scenario, assessing skills (Standardized patient) and creating "virtual patients", etc.) and in the specialty (Fundamentals of biosafety in the laboratory, Current issues of hygiene and epidemiology, The big catch-up of immunization, Reproductive health of adolescents and young adults, Standard precautions. Hand hygiene, etc.). These activities are funded by the university. However, there are some problems - not all faculties have undergone biosafety training.

Experts have found that teachers initiate research topics for master's students, stimulate the need for additional training and independent work with literature, medical accounting and reporting documentation, and the strategic plan of a medical organization.

The HR department ensures proper monitoring of teachers' activities through questionnaires. Feedback on issues of satisfaction with the educational process, professional and personal development is conducted twice a year. The responsible department is the HR department.

Teacher satisfaction indicators are improving dynamically.

The university offers opportunities for career growth and development of teacher competencies - 88% of surveyed teachers answered that they completely agree, 12% - partially agree with this. The university implements social support programs for teachers - 52% answered that "yes, such programs exist", 4% - "I have already used this", 4% of respondents answered that there are no such programs, and 36% of respondents do not know about this, 4% - are unsure with the answer.

5.3 Number and qualifications of teaching and management personnel

Training of master's students in the specialty "7M10128 "Biological Safety" specialized direction" is conducted by 3 doctors of medical sciences and professors, including 2 members of public academic sciences, 3 members of professional associations and scientific societies and 1 professor of domestic and foreign universities. The team also includes 4 candidates of medical sciences, associate professors and 2 master's students. The ratio of "master's student - teacher" is 1:5.

Master's students have scientific supervisors (mentors) who help with the completion of the dissertation work. In total, there are 1 scientific supervisor, who are represented by the accredited educational programme.

5.4 Administrative support

The activities providing administrative support for master's students and teachers are described and published, which include trips to conferences, financial assistance for publishing articles in international databases, and payment instalments for master's students.

Conclusions of the EEC by criteria. Comply with 7 basic standards: fully - 5, partially - 2, do not comply - 0.

Recommendations for improvement:

- 1) To attract biosafety specialists to the staff
- 2) To improve the qualifications of teachers teaching at the master's level taking into account the profile

Standard 6: EDUCATIONAL RESOURCES AND LEARNING ENVIRONMENT

6.1 Learning environment

A review of the resources showed that they correspond to the goals and objectives of educational activities, for example, the practical bases visited were: Department of Public Health and Epidemiology; Department of Public Health and Hygiene; Institute of Radiobiology and Radiation Protection, which have a conference hall, classrooms for students, and the employees of the educational organization ensure collegial and ethical relationships with the staff, the management of the practical base to achieve the final results of the master's students. The employees, who simultaneously act as teachers and curators (mentors), ensure high-quality training in compliance with ethics and deontology. Before starting the relevant discipline of the educational programme, the master's student receives a syllabus from the teacher and knows what skills he should acquire and develop during the training. All conditions for acquiring skills have been created at the practical base;

there are laboratories (laboratory of radiation safety and hygiene, sanitary and hygienic laboratory), access to the accounting and reporting documentation of the organization.

During a visit to the practice bases, where experts conducted a survey of resources, their compliance with training programs, and accessibility for teachers and master's students, how modern this equipment is and meets the needs of students and practical health care. The experts received evidence of compliance with standard 6, as well as validation of the self-assessment report information.

There is a library with a fund. The volume of the book fund for the EP 7M10128 - "Biological Safety" is 9240, of which textbooks and educational literature - 8376 copies, scientific literature - 864 copies, including in the Kazakh language - 2365 copies, in Russian 5127 copies and in English - 1748 copies. In order to validate the implementation of the self-assessment report data and obtain evidence of the quality of the programs, an interview was conducted with master's students in the specialty "7M10128 "Biological Safety" Profile direction". The experts asked questions about satisfaction with training, satisfaction with teaching methods and qualifications of teachers, social and moral support for master's students in need of it, the availability of resources of international databases of professional literature. In general, the master's students are satisfied with the training, assessment methods, and purposefully entered the university, as they believe that the university has good resources, image and international connections, at the same time, the master's students would like classes to be more practical with demonstration and honing of skills in the workplace, international events.

The master's students demonstrated their commitment to the university, were active in answering questions from external experts, demonstrated their judgment on the organization of training, assessment of their skills, advisory support, conducting research, financing.

The experts studied the documents of the master's students (IWPM, results of the assessment of master's students).

An interview with 12 teachers, including 12 full-time teachers, showed that there are both successes and problems in the management of education, depending on the specific base (time for maintaining documentation, independent work).

Students have free access to patients at clinical sites and all the conditions for improving their practical skills - 80% of teachers completely agree with this, 12% - partially agree, 8% - were unsure about the answer.

An interview with 12 teachers, including 9 full-time teachers, showed that there are both successes and problems in the management of education, depending on the specific base (admission of master's students to equipment, time for maintaining medical documentation, independent work).

6.2 Information technologies

In order to support the mission of the educational programme, the library provides users with access to its own (electronic library, repository) and subscription databases (hereinafter referred to as DB), under a national license to international databases of full-text resources:

A policy has been implemented that is aimed at the effective use and assessment of information, communication and distance technologies in the training of master's students. It is regulated in the rules of the "Organization of the educational process on distance educational technologies in NJSC "AMU" PR-AMU-35-22". Portals with authorized access are functioning: an information system designed for planning and automation of the educational process in higher educational institutions with a medical profile, according to the standards of credit technology of education. "Platonus" (pl.amu.kz), electronic library (bibl.amu.kz), Erasmus+ (erasmus.amu.kz.), distance learning platform (dl.amu.kz), Lectorio - online platform for medical education (<https://astanamed.lectorio.com/>), as well as Massive Open Online Courses of NJSC "Astana Medical University" (<https://mook.amu.kz/>), electronic library catalogue (<https://elib.kz/>).

The IT Infrastructure and Information Systems Administration Department operates.

The university territory is provided with the Internet and WI-FI.

The university has 1633 computers, 493 laptops, 14 multimedia departments, 18 multimedia equipment in lecture halls, 60 interactive panels, and interactive whiteboards. The library has 79 computers with Internet access.

For distance learning, there is a developed distance learning system (DLS). For conducting research, writing a dissertation, independent learning and access to the necessary information, master's students have access to international databases, including Web of Science (Clarivate Analytics), Science Direct (Elsevier), Scopus (Elsevier), Springer, Cochrane Library, Wiley Online library, Wiley Researcher Academy, Jaypee digital, Aknurpress, IPRSmart, LECTURIO, Student Consultant, Doctor's Consultant, RMEL and other databases. Also, during the year, test access was provided to online journals of Cambridge University Press; to the databases of the international publishing house Primal Pictures, Access Medicine, The BMJ Group, ACS Publications, etc.

Conclusions of the EEC by criteria. Comply with 4 basic standards: fully - 4, partially - 0, do not comply - 0

Standard 7: MONITORING AND EVALUATION OF THE EDUCATIONAL PROGRAMME

7.1 Mechanisms for monitoring and evaluating the program

There is a program for monitoring educational activities, including an assessment of the effectiveness of each educational programme. For example, EP 7M10128 - "Biological Safety" Profile direction" is aimed at interdisciplinary connections and a competence-oriented approach using technologies, taking into account the final learning outcomes. The mechanisms for evaluating the master's programme at NJSC "MUA" include the following: monitoring the provision of the educational process with resources (clinical sites, educational literature, classrooms, equipment, composition of the teaching staff: teachers, clinical mentors, curators); monitoring the compliance of curricula with the requirements of state educational standards; monitoring feedback from stakeholders on the quality of the content of the EP; monitoring the academic performance of students.

The university has developed a procedure for approving and periodically reviewing the content of educational programmes at all levels, including master's programmes.

The assessment of the content of the educational programme is supported by the following stages: compliance with the procedure for developing the educational programme; review of the educational programme by competent persons; timely revision of the educational programme, taking into account the proposals and comments formulated by employers and other stakeholders; broad discussion of the educational programme; acceptance of recommendations for approval; compliance with the procedure for approving the educational programme.

The content of the master's degree program, teaching methods, and assessment are assessed based on feedback from master's students, department staff, and other stakeholders, as well as within the framework of the master's and doctoral QC. Educational programmes undergo an annual quality assessment procedure at a department meeting, with the participation of the department's faculty, students, and employers.

An analysis of the feedback from master's students, conducted at the end of the academic year, allows us to assess the quality of the training provided, identify the positive and negative aspects of the master's degree programs being implemented, for subsequent decision-making regarding its improvement. The quality of the content of educational programmes is evaluated based on the analysis of curricula, a catalogue of elective disciplines, a schedule, teaching and methodological complexes, internal regulatory documents governing the implementation of educational programmes, and a survey of students and employers.

Timely and systematic adjustments to master's degree programs help maintain their relevance. Systematic revision and supplementation of the lists of specialized, elective, and practice-oriented disciplines, modules, and practices developed at the university also maintains the relevant content of master's degree programs. The basis of the implemented courses is the learning outcomes according to the current State Educational Standard.

The content of the control and measuring tools (tests, checklists) is also subject to examination for compliance with the requirements for the content of educational programmes and the State Compulsory Educational Standard. The scientific supervisors monitor the semi-annual and annual reports of the master's student and monitor the implementation of scientific work, according to the planned individual plan of the master's student. The end-of-course assessment and defence of master's dissertations is carried out by the State Attestation Commission, which includes the chairman, members of the commission, including independent experts from other universities and the secretary.

The programme is consistent with the mission of the university, and is aimed at satisfying the interests of consumers and meeting the needs of employers. The schedule of classes according to the educational programme, WCs is drawn up by the Research School and agreed with the heads of departments in order to avoid overlaps among teachers. Supervisors have the opportunity to participate in the organization of the specialty curriculum during direct discussion and approval of work programs and the list of elective disciplines at department and Academic Council meetings.

Master's students can orally or in writing contact the supervisor or supervising vice-rector on issues of the quality of the educational programme on the implementation of the curriculum. The results of the feedback from students affect the organization and implementation of the educational programme (choice of elective disciplines, teaching staff, educational facilities, etc.).

EP 7M10128 - "Biological Safety" has only been implemented, monitoring and evaluation were not carried out.

7.2 Feedback from teachers and master's students

The University collects, analyses and provides teachers and master's students with feedback on the quality of the implementation of the educational programme. This process is carried out by various structural divisions, departments and departments also conduct monitoring by conducting a survey in order to identify the level of satisfaction with the educational programme of the university community.

The frequency of collecting feedback is carried out after passing each discipline.

7.3 Activities of Master's students and graduates

In 2024, 1 Master's student began studying.

During interviews with Master's graduates, experts learned that, in general, Master's programs are implemented at the university at the proper level; many Master's graduates plan to continue their studies in doctoral studies.

The results of the analysis of the activities of Master's students (academic performance, dissertation defence) are provided by the Department of Public Health and Epidemiology to the research school and the Master's and Doctoral Coordination Centre, which are responsible for the admission of Master's students, the development of the educational programme, and the counselling of Master's students.

An interview with 5 employers was conducted online and included questions such as: knowledge of the university mission, participation in developing the mission and proposals for the strategic plan, participation in the work of advisory bodies, satisfaction with the basic knowledge and skills of master's students, participation in training master's students through mentoring, providing the department and master's students with the necessary resources for practical training and the development of clinical thinking, problems of interaction with departments and universities in general, 100% employment of master's graduates.

Conclusions of the EEC by criteria. Comply with out of 8 basic standards: fully - 8, partially - 0, do not comply - 0

Standard 8: MANAGEMENT AND ADMINISTRATION

8.1 Management (supervising vice-rector's office)

According to the Organizational structure of NJSC "AMU" <https://amu.edu.kz/upload/images/struktura-012024.jpg> general management, monitoring and control of the implementation of master's programs is carried out by the Research School, which is supervised

by the Member of the Board, Vice-Rector for Research and Strategic Development. He is accountable to the Chairman of the Board - Rector. During our visit to the university, we had an interview with the Vice-Rector of the MBA of the Higher School of Public Health Saidangazin D.D., Dean of the Research School Raisova K.A. The Department of Public Health and Epidemiology is responsible for the accredited educational programme. All processes of education management in the master's program EP 7M10128 - "Biological Safety". Profile direction" are regulated and described in the "Academic Policy".

8.2 Program Manager (Dean's Office/Department)

The Department of Master's and Doctoral Studies is a division that is part of the organizational structure of the University (*approved on March 29, 2024*). The Department of Master's and Doctoral Studies reports to the Vice-Rector for Scientific and Clinical Work and closely interacts with all structural divisions. The functions in relation to the Master's program are: planning admission in the Master's program for the new academic year; admitting Master's students for training; consulting Master's students on issues of the educational process (meetings, individual consultations, etc.); organizing self-government at the Master's level; sending a Master's student for training under academic mobility; providing the Educational Department with information on the contingent of Master's students; drafting Orders on the training process of Master's students; organizing internships for Master's students; organizing midterm and final certification of Master's students; conducting audits and inspections of Master's departments for attendance of classes by Master's students. The efficiency of the dean's office is assessed based on the indicators of scientific activity of the teaching staff and students.

To the question in the questionnaire "Do the heads of the organization listen to your opinion regarding issues related to the educational process, research, and clinical work?", 91.67% of the teachers answered that they do so systematically, and 8.33% answered "sometimes".

8.3 Academic Management (Department)

The Master's degree program in the specialty EP 7M10128 - "Biological Safety" Profile direction" is implemented in the departments of public health and epidemiology. The graduating department is the Department of Public Health and Epidemiology with a staff of 12 people, with a degree rate of 58%. Feedback about the department is positive, both from students and from employers and graduates of other EPs

8.4 Program Management

The academic leaders (program managers) are employees of the graduating department of public health and epidemiology. The staff has the appropriate qualifications: 3 Doctors of Medical Sciences, professors, 4 Candidates of Medical Sciences, associate professors and 2 master's degree students, including 2 members of public academic sciences, 3 members of professional associations and scientific societies and 1 professor of domestic and foreign universities. The team also includes 4 Candidates of Medical Sciences, associate professors and 2 master's degree students. In their work, they are guided by the "Academic Policy" and job descriptions approved by the faculty. The main function of this unit is to develop an educational programme and implement it, evaluate the compliance of the tools for assessing the achievements of master's degree students in the specialized field with the established learning objectives and analyse the degree to which students achieve the final learning outcomes.

8.5 Budget for training and resource allocation

The main sources of formation of financial resources for the educational process at the university are: funds from the republican budget; funds from the provision of educational and other paid services; other receipts.

Every year, a commission headed by the Chairman of the Board - Rector visits departments to determine the availability of material and technical equipment, classrooms, and working conditions. Management and use of resources is administered by the Chairman of the Board - Rector of the University.

The distribution of financial resources is carried out in accordance with approved plans developed on the basis of a thorough analysis of areas of activity and structural divisions, as well as on the basis of limits, norms and standards, based on the need and availability of material resources in these areas.

In order to ensure transparency in the budget formation process, the university operates a principle of centralized distribution of financial resources and the formation of material assets.

In this regard, departments annually submit applications for the purchase of equipment and consumables, taking into account the need to update the material and technical base for inclusion in the development plan for the upcoming financial year.

Over the past 5 years, the University has been continuously allocating funds to replenish the fund of educational literature, and computer equipment and medical equipment are purchased annually.

The cost of training one master's student on a contractual basis is approved by the University annually in the context of the EP in agreement with the Ministry of Health of the Republic of Kazakhstan within the average cost of training, by groups of specialties determined by the relevant Government resolution for the academic year.

For the 2023-2024 academic year, the cost of tuition in the specialized master's program was 1,122,000 tenge. The terms of payment and the amount are specified in the bilateral agreement.

8.6 Administration

The head of the EP 7M10128 - "Biological Safety", the specialized direction of NJSC "AMU" is the head of the Department of Public Health and Epidemiology.

Data on the professional training and professional experience of the administrative staff are posted in the relevant sections of the University website, reflecting the organizational structure of NJSCMUA.

The rights, obligations and functional list of the supreme bodies of the University are regulated by the Charter of the NJSC "AMU". The boundaries of responsibility and management in relation to the design of the educational programme and its various components are determined within the framework of the following documents: Regulations on the Master's program, regulations on structural divisions.

Monitoring of the accredited program is carried out according to the Procedure for assessing satisfaction by surveying students after each completed discipline, then the faculty members responsible for the programme analyse the results of the questionnaires.

During the visit to the practical base, the head of the department provided all the information about the classes at this base. The experts got acquainted with the classrooms, conference room, laboratories.

8.7 Requirements and legal documentation

Much attention is paid to the guarantee of transparency of all educational processes in the Master's programs, including 7M10128 - "Biological safety, specialized direction. All information related to the processes of the Master's program is compiled in the "Academic Policy". All information is available on the university website <https://amu.edu.kz/>

8.8 Review and approval process

A documented process for planning, discussing and updating the educational programme for specialty 7M10128 - "Biological safety, specialized direction" (meetings No. 7, dated 06.02.2022) has been introduced, responsibility for which lies with the head of the EP - the head of the department of public health and epidemiology, everything is recorded in the minutes.

The educational programme is updated as regulatory documents (SCES) change, as well as proposals are received from both students and employers.

Documentation of joint activities with other educational organizations is carried out through the conclusion of memorandums and cooperation agreements. A total of 20 agreements have been concluded with republican institutions and 114 agreements with foreign organizations and associations. In particular, the master's program in the specialty "7M10128 - "Biological Safety" is implemented in cooperation with the following republican organizations: RSE on the REM "National Centre of Expertise" of the CSEC of the Ministry of Health of the Republic of Kazakhstan; Kazakh National Medical University named after S. Zh. Asfendiyarov; NJSC "Medical University of Semey"; JSC "National Holding QazBioPharm; foreign organizations: Tashkent Medical Academy, Tashkent,

Uzbekistan; Centre for Development of Professional Qualifications of Medical Workers, Tashkent, Republic of Uzbekistan; Azerbaijan Medical University, Baku, Azerbaijan; Perm State Medical University; South Leutin State University jointly with Global Health Focus, BGC, Taguig City, Republic of the Philippines; International Higher School of Medicine, Bishkek, Kyrgyzstan.

Admission of master's students to the NJSC "Astana Medical University" is carried out on the basis of the "Rules for Admission to the Master's Program" <https://amu.edu.kz/upload/iblock/4bb/4bbba898e45999c1018e338e61d50301.pdf>. Admission of an applicant to the master's program for free education is carried out after successful completion of the comprehensive testing (CT), receiving a certificate equal to 150 points.

8.9 Financing

The university has financial stability, which is ensured by the state order for the training of masters in the specialty "7M10128 - "Biological Safety" and training on a fee-based basis (the cost of training is 1,122,000 tenge per year).

The cost of training per 1 student for the relevant academic year, which includes all types of expenses under the programme, is determined by the Ministry of Health of the Republic of Kazakhstan and is allocated in accordance with the Agreements for the provision of services for training specialists with higher and postgraduate medical and pharmaceutical education.

There is 1 master's degree student studying on a fee-paying basis. The sources of funding are medical and scientific activities: paid medical and educational services, implementation of scientific and technical programs of the Ministry of Health of the Republic of Kazakhstan and the Ministry of Health and Higher Education.

The salary fund of master's degree teachers is 8,411,278,510 tenge per year. The average salary of a teacher is 504,273.29 tenge. The salary of teachers is growing dynamically.

The costs of purchasing equipment and replenishing the library fund in 2024 amounted to - medical equipment 265,523,000 tenge, visual aids 67,617,000 tenge, and educational literature 347,012,000 tenge.

8.10 Financial management and integrity

The management of the financial and economic policy and activities of NJSC "MUA" is the responsibility of the first head of the university - the rector. Financial issues are under the jurisdiction of the director of the financial work department and the chief accountant of the university, whose job responsibilities and powers are established by the job description and the Regulation on the financial work department.

The implementation of master's programs is supported by the salary fund of master's teachers, provision of students with educational resources (educational and scientific literature, access to the Internet and international information databases of literature, information and communication technologies). The university operates on the principle of centralized distribution of financial resources and formation of material assets. Distribution of financial resources is carried out in accordance with the approved form of the financial and economic activity plan for the current year.

The report on the financial, economic and economic activities of the University for the Year and long-term work plans for the next year is heard at the Academic Council of the University.

8.11 Programme information

Full information about the educational programme is available at the Department of Public Health and Epidemiology and is posted on the university website to be accessible to interested parties. There is various communication channels, including the website, social networks (Facebook, Instagram), leaflets and brochures have been developed, which contain reference information.

Information for admission to the master's programme is posted in four languages in the Admissions Committee section of the website.

Conclusions of the EEC by criteria. Compliance out of 19 basic standards: fully - 19, partially - 0, do not comply - 0

Standard 9: CONTINUOUS RENEWAL

The university initiates regular review procedures in the form of internal audits and external expertise (accreditation, audits). The internal evaluation is carried out by the Educational Process Quality Audit Group (EPQA) as part of the self-assessment; the quality assurance policy is regulated by the Education Quality Assurance Policy (minutes No. 27 dated December 2024). The responsible unit is the Quality Assurance Committee (QAC).

Based on the results of the self-assessment of the educational programme of the Master's degree "7M10128 - "Biological Safety", weaknesses were identified - the lack of practice bases specializing in biological safety; the lack of Academic staff with practice (specialists in BS). The following opportunities for improving the training program have been identified: joint educational programmes, internships within the framework of memorandums and projects of the AMU Erasmus, academic mobility of both teaching staff and students in biological safety, visits by leading scientists and specialists in the field of BS.

For the internal assessment and monitoring of the educational programme, the Educational Process Quality Audit Group conducts surveys among the participants of the educational programme. The main objective of the survey is to obtain objective information on the effectiveness of teaching at the university and assess the satisfaction of participants in the educational process in order to improve the quality of education. To systematize this process, the working group developed a catalogue of questionnaires in three languages approved at a meeting of the academic council (https://drive.google.com/file/d/1r51AL2huLm5ZNLrLMlxMIbqHGEMi8Ome/view?usp=drive_link), which is subsequently planned to be used to conduct surveys in mobile applications and other information systems. Various survey methods, including the use of QR codes and a Telegram bot, are provided to ensure the convenience of participants. Various structural divisions, schools and departments also conduct surveys to identify the level of satisfaction with the educational programme of university community members. The method of conducting a survey using QR codes was discussed at the hardware meeting (https://drive.google.com/file/d/10bU7Hpz6dFecSYLA0LyhCIGsE65vrsvc/view?usp=drive_link). The use of QR codes allows you to save time and simplify the process of filling out questionnaires, and also helps to increase the response from participants, which is important for obtaining more complete and reliable information about the quality of education at the university. The results of the survey are reported to all interested parties and to the Academic Council.

The organizational structure of the university was updated in 2024.

Based on the results of external and internal evaluations, a program of corrective measures is developed. The head of the Department of Public Health and Epidemiology is responsible for its implementation. The University conducts research in postgraduate education as part of research work in the scientific and pedagogical master's program and experimental research work in the specialized master's programme. While conducting research, the master's student masters research, analytical and expert skills. The results of such research are publications.

Risk assessment in the educational process is carried out through identification, monitoring and analysis of risks, as well as planning and implementation of preventive actions. A risk register and a risk management map of the University are formed, which include risks for all processes of the University's activities, the tasks of which include identifying and managing risks and minimizing risks, including risks in the educational process. In relation to the master's program, the risks of the EP content, EP management, EP implementation process have been identified in accordance with Section 6 of SU-AMU-82-23, approved on 12.01.24, as well as the risks of a decrease in the number of applicants for the master's programs, late payment for tuition, the presence of high-quality Academic staff, the presence of automated systems for providing educational technology for teaching, digital educational resources, etc. Risk management work is carried out by improving the quality of teaching, the qualifications of the teaching staff, the introduction of new interactive technologies to raise the University's rating in a competitive environment, the introduction of information and innovative digital technologies and educational projects, providing students with high-quality learning conditions,

providing educational and laboratory, material and technical base, equipment, library funds, etc. The University conducts benchmarking and includes such leading universities as Nazarbayev University, Lithuanian University of Health Sciences, Volga Region Research Medical University, Medipol University (Turkey), Sechenov University. As a result of benchmarking, innovative methods of educational process management (creation of the automated SmartAMU system, Platonus platform, business process maps, joining the League of Academic Integrity), management of the educational programme of the master's degree (determination of heads of educational programmes, monitoring, evaluation, analysis, updating), teaching methods (multimedia lectures; problem lectures (PBL); case-based learning (CBL), including analysis of specific situations (ASS or case study); team-oriented learning (TBL), including work in small groups; role-playing, business games; use of problem and situational tasks in practical classes; - e-learning; methods of assessment of master's students (testing, written exam, checklist, project, oral exam), research work (defence of the master's dissertation and its assessment according to the criteria: background of the research work, relevance and novelty, research methodology, practical significance).

The university allocates resources for continuous renewal, which is documented in the university's strategic development plan for 2022-2026 and in the financial plan (budget) for 2024.

NJSC "AMU" is actively strengthening its position in the international educational arena, taking part in prestigious world rankings and demonstrating impressive results: QS Stars Rating System, UI GreenMetric World University Ranking, and Times Higher Education World University Rankings 2025. These achievements demonstrate the growing international prestige of our university and its desire to lead the global educational arena.

Conclusions of the EEC by criteria. Compliant with out of 4 basic standards: fully - 3, partially -1, do not comply - 0.

Recommendations for improvement:

- 1) To introduce foreign internships, academic mobility, visits.
- 2) To develop joint educational programmes.
- 3) To implement individual calculation of the efficiency coefficient for the Academic staff.

CONCLUSION:

During the external evaluation of the educational programme, it was found that out of **90 standards** (including 88 basic standards and 2 improvement standards), 84 standards for accreditation demonstrate full compliance, including 84 basic standards and 0 improvement standards. 4 basic standards are partially implemented. No non-compliance with standards was found.

5. Recommendations for improvement of the educational programme "7M10128 - "Biological Safety":

- 1) To undergo practical training in the laboratory of especially dangerous infections.
- 2) To attract biosafety specialists to the staff.
- 3) Advanced training of teachers teaching at the master's level, taking into account the profile.
- 4) To introduce foreign internships, academic mobility, and visits.
- 5) To develop joint educational programmes.
- 6) To introduce individual calculation of KPI for the Academic staff.

6. Recommendation to the ECAQA Accreditation Council

The EEC members established the compliance of the educational programme of the Master's degree "7M10128 - "Biological Safety" with the ECAQA Standards for accreditation and came to a unanimous opinion to recommend that the ECAQA Accreditation Council to accredit this program for a period of 5 years.

	Full name	Signature
Chairman of the EEC	Serikova-Yesengeldina Dinara Serikovna	
International Expert (online)	Isaeva Natalia Viktorovna	
Academic Expert	Yeshmanova Ainur Kairkenovna	
Academic Expert	Maukaeva Saule Boranbaevna	
Employer Expert	Aushakhmetova Zabira Tezekbaevna	
Student Expert	Arkhatova Gaukhar	

Профиль качества и критерии внешней оценки по стандартам аккредитации образовательной программы магистратуры по специальности магистратуры «7М10128 – «Биологическая безопасность»»

стандарт	Критерии оценки	БС/СУ*	Всего стандартов	Оценка		
				Полностью соответствует	Частично соответствует	Не соответствует
1	МИССИЯ И КОНЕЧНЫЕ РЕЗУЛЬТАТЫ	5/0	5	5/0		
2	ОБРАЗОВАТЕЛЬНЫЕ ПРОГРАММЫ	19/2	21	18/2	1/0	
3	ОЦЕНКА МАГИСТРАНТОВ	10/0	10	10/0		
4	МАГИСТРАНТЫ	12/0	12	12/0		
5	АКАДЕМИЧЕСКИЙ ШТАТ	7/0	7	5/0	2/0	
6	ОБРАЗОВАТЕЛЬНЫЕ РЕСУРСЫ, СРЕДА ОБУЧЕНИЯ, ДОСТИЖЕНИЯ	4/0	4	4/0		
7	МОНИТОРИНГ И ОЦЕНКА ОБРАЗОВАТЕЛЬНОЙ ПРОГРАММЫ	8/0	8	8/0		
8	УПРАВЛЕНИЕ И АДМИНИСТРИРОВАНИЕ	19/0	19	19/0		
9	НЕПРЕРЫВНОЕ УЛУЧШЕНИЕ	4/0	4	3/0	1/0	
	Итого	88/2	90	84/2	4/0	

Список документов, изученных членами ВЭК в рамках проведения внешней оценки образовательной программы магистратуры

№	Наименования документов	Количество
1.	Соглашение о сотрудничестве между АО «Национальный Холдинг» Казбиофрм и НАО МУА	1
2.	Выписка из протокола кафедры об утверждении ОП	1
3.	Протокол КОК	1
4.	Протокол УС	1
5	ОП «7М10128 – «Биологическая безопасность»	1
6	Рецензии на ОП «7М10128 – «Биологическая безопасность»	2
7	Силлабус «7М10128 – «Биологическая безопасность»	1
8	Академическая мобильность	1
9	Акты внедрения инновационных технологий	5
10	Академическая политика	1
11	Кодекс академической честности	1
12	Standard планирования учебного процесса в НАО МУА	1
13	Standard «ОП, разработка и обновление»	1
14	Standard о проведении промежуточной и итоговой аттестации в НАО МУА	1
15	Рабочая инструкция по ведению электронного журнала	1
16	Отчет по самооценке	1
17	Сертификаты магистрантов	1
18	Положение об обучении в магистратуре	1
19	Консультанты по магистрантам	1
20	Состав КОК	1
21	Научный потенциал	1
22	Показатели научной деятельности	1
23	Положение о кадровом резерве	1
24	О рейтинге ППС	1
25	Конкурс замещения вакансий	1
26	Кадровая политика	1
27	Положение о плагиате	1
28	Положения об использовании автоматизированной системы для обнаружения плагиата и проверки текстов на заимствование	1
29	Управление процессом отбора и приема обучающихся в магистратуру	1
30	Правилах приема в магистратуру НАО «Медицинский университет Астана	1
31	Политика по обеспечению качества образования	1
32	Миссия НАО МУА	1
33	Индивидуальный план работы магистранта	1
34	Модель оценки образовательных программ	1
35	Инструкция «По ведению электронного журнала успеваемости»	1
36	Организации учебного процесса по дистанционным образовательным технологиям в НАО МУА	1
37	Устав НАО МУА	1