



«АККРЕДИТТЕУ ЖӘНЕ РЕЙТИНГТІҢ
ТӘУЕЛСІЗ АГЕНТТІГІ» КЕМ

НУ «НЕЗАВИСИМОЕ АГЕНТСТВО
АККРЕДИТАЦИИ И РЕЙТИНГА»

INDEPENDENT AGENCY FOR
ACCREDITATION AND RATING

REPORT

on the results of the work of the external expert evaluation committee for compliance with the requirements of the standards of primary

specialized accreditation of

6B01507 (5B012900) - "Geography-History"

6B01508 (5B012700) - "Mathematics-Informatics"

6B01509 (5B012600) - "Mathematics-Physics"

6B01510 (5B012800) - "Physics-Informatics"

6B01511 (5B012500) - "Chemistry-Biology"

educational programs

MANASH KOZYBAYEV NORTH KAZAKHSTAN UNIVERSITY

During the period from November 9 to 11, 2020

INDEPENDENT ACCREDITATION AND RATING AGENCY
External expert commission

Addressed
to Accreditation
the IAAR Council



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(I) LIST OF SYMBOLS AND ABBREVIATIONS

AC - Academic Calendar
AIS - Automatic Information System
BD - Basic disciplines
CED - Catalogue of elective disciplines
CT - Complex testing
DET - Distance Education Technologies
DP/DW - Diploma project/diploma work
ECTS - European Credit Transfers and Accumulation System
EELA - External evaluation of learning achievements
EP - Educational programmes
ESG - Standards and guidelines for quality assurance in the European Higher Education Area
EW - Educational work
FC - Final Control
FSC - Final state certification
GED - General education disciplines
HAC - Higher Attestation Commission
HEI - Higher education institution
ICT - Information and communication technologies
ILP - Individual learning plan
IWMS - Independent work of Master's students
IWST - Independent work of students with a teacher
IWT - Independent work of trainees
MC - Mandatory component
MC - Model Curriculum
MEP - Modular educational programmes
MES RK - Ministry of Education and Science of the Republic of Kazakhstan
NKSU - M.Kozybayev North-Kazakhstan State University
OC - Option Component
OTP - Operational Training Plan
PD - Profiling disciplines
PTS - Professorial and teaching staff
QMS - Quality Management System
Rc - Rouge control
RDWS - Research and development work by students
RK - Republic of Kazakhstan
RW - Research work
RWMS - Research work of Master's students
SAC - State Attestation Commission
SESO - State compulsory standard of education
TMC - Training and methodological complex
TMC - Training and Methodological Council
TMCD - Training and methodological complex of the discipline
TMCS - Training and methodological complex of the specialty
UNT - Unified national testing

(II) INTRODUCTION

In accordance with order No. 99-20-OD dated 20.10.2020 of the Independent Agency for Accreditation and Rating from 09 to 11 November 2020, an external expert commission assessed the compliance of the educational programs 6B01508 (5B012700) - "Mathematics-Informatics", 6B01509 (5B012600) - "Mathematics-Physics", 6B01511 (5B012500) - "Chemistry-Biology", 6B01507 (5B012900) - "Geography-History", 6B01510 (5B012800) - "Physics-Informatics" NJSC "M. Kozybayev North Kazakhstan University" (M. Kozybayev NKU) (Petropavlovsk) to the standards of primary specialized accreditation of the IAAR (No. 68-18 / 1-OD dated May 25, 2018, first edition). The report of the external expert commission (EEC) contains an assessment of the submitted educational programs against the criteria of the IAAR standards, recommendations of the EEC for further improvement of educational programs and parameters of the profile of educational programs.

The EEC list:

1. **Chairman of the IAAR Commission** – Shcherbina Alexey Vladimirovich, Candidate of Economic Sciences, Doctor of Philosophy, Associate Professor, Federal State Autonomous Educational Institution of Higher Education "Southern Federal University" (SFedU) (Rostov-on-Don, RF);
2. **IAAR Foreign expert** - Kostelova Larisa Dmitrievna, Candidate of Pedagogical Sciences, member of the Guild of Experts in the Field of Professional Education (Novokuznetsk, RF);
3. **IAAR Foreign expert** – Bazikov Alexander Sergeevich, Honored Art Worker of the Russian Federation, Doctor of Pedagogical Sciences, Professor, Gnnessin Russian Academy of Music (Russian Federation, Moscow);
4. **IAAR Foreign expert** – Sousana Michailidou, Vice-Rector for Academic Affairs, Professor at Webster University in Athens, Vice-President of the European-Mediterranean Academy of Arts and Sciences (Greece);
5. **IAAR Foreign expert** – Markova Valentina Aleksandrovna, Candidate of Pharmaceutical Sciences, Associate Professor, St. Petersburg State Chemical and Pharmaceutical University of the Ministry of Health of Russia (St. Petersburg, Russian Federation);
6. **IAAR expert** – Lebedeva Larisa Anatolyevna, Candidate of Pedagogical Sciences, Associate Professor, Kazakh National Pedagogical University named after Abay (Almaty);
7. **IAAR expert** - Kegenbekov Zhandos Kadyrkhanovich, Candidate of Technical Sciences, Associate Professor, Kazakh-German University (Almaty);
8. **IAAR expert** – Aldungarova Aliya Kairatovna, Doctor PhD, Associate Professor, NJSC "Toraigyrov University" (Pavlodar);
9. **IAAR expert** – Kudabayeva Aigul Kaldybekovna, Candidate of Technical Sciences, Associate Professor, Taraz Regional University named after M.Kh. Dulati (Taraz);
10. **IAAR expert** – Omarov Rustem Tukenovich, Candidate of Biological Sciences, PhD, Eurasian National University named after L. N. Gumilyov (Nur-Sultan);
11. **IAAR expert** – Madiyeva Galiya Bayanzhanovna, Candidate of Pedagogical Sciences, Associate Professor, al-Farabi Kazakh National University (Almaty);
12. **IAAR expert** – Abenova Elena Anatolyevna, Candidate of Pedagogical Sciences, Associate Professor, Narxoz University (Almaty);
13. **IAAR expert** – Zakirova Dilnara Ikramkhanova, PhD, "Turan" University (Almaty);
14. **IAAR expert** – Akybaeva Gulvira Sovetbekovna Candidate of Economic Sciences, Astana IT University (Nur-Sultan);
15. **IAAR expert** – Galiakbarova Guzal Gazinurovna, PhD, Eurasian National University named after L. N. Gumilyov (Nur-Sultan);

16. **IAAR expert** – Zhumabekov Meiram Kenesovich, Candidate of philological sciences, Associate Professor, Karaganda University named after academician E.A. Buketov (Karaganda);
17. **IAAR expert** – Burbekova Saule Zhorabekovna, Candidate of philological sciences, Associate Professor, Astana IT University (Nur-Sultan);
18. **IAAR expert** – Niyazova Raigul Esengeldievna, Candidate of Biological Sciences, al-Farabi Kazakh National University (Almaty);
19. **IAAR expert** – Kulzhumieva Aiman Amangeldinovna, Candidate of Physical and Mathematical Sciences, West Kazakhstan University named after Makhambet Utemisov (Uralsk);
20. **IAAR expert** – Khamraev Sheripidin Itakhunovich, Candidate of Technical Sciences, Professor, Kazakh National Pedagogical University named after Abay (Almaty);
21. **IAAR expert** – Gabdulina Ainur Zhumagazyevna, Candidate of Historical Sciences, Acting Associate Professor, Kazakh Agro Technical University named after S. Seifullin (Nur-Sultan);
22. **IAAR expert** – Isaeva Kuralai Smetkanovna, Candidate of Technical Sciences, "Toraigyrov University" NJSC (Pavlodar);
23. **IAAR expert** – Tautenov Ibadulla Aigalievich, Doctor of Agricultural Sciences, Professor, Kyzylorda University named after Korkyt Ata (Kyzylorda);
24. **IAAR expert** – Nurgazy Kuat Shaipollauly, Doctor of Agricultural Sciences, Professor, Kazakh National Agrarian University (Almaty);
25. **IAAR expert** – Stybaev Gani Zhasymbekovich, Candidate of Agricultural Sciences, Professor, Kazakh Agro Technical University named after S. Seifullin (Nur-Sultan);
26. **IAAR expert** – Omarkulov Bauyrzhan Kadenovich, Candidate of Medical Sciences, Associate Professor, "Medical University of Karaganda" NJSC (Karaganda, Republic of Kazakhstan);
27. **IAAR Employer** – Pilipenko Yuri Aleksandrovich, Chairman of the Board of Directors, International Association of Producers of Goods and Services "EXPOBEST" (Almaty);
28. **IAAR Employer** – Rezov Mikhail Grigorievich, Chief Specialist of the Department for Support of the Electronic Document Management System, "National Information Technologies" JSC (Nur-Sultan);
29. **IAAR student** – Rakhimova Aziza Zhomartovna, 4th year student of the "Construction" EP, Karaganda Technical University (Karaganda);
30. **IAAR student** – Bobkova Svetlana Sergeevna, 4th year student of the "Finance" EP, Kostanay Regional University named after A. Baitursynov (Kostanay);
31. **IAAR student** – Almukhanov Ablaykhan Kabdrashitovich, member of the Alliance of Students of Kazakhstan, 4th year student of the "Agronomy" EP, Kokshetau University named after Sh. Ualikhanov (Kokshetau);
32. **IAAR Agency Observer** – Kanapyanov Timur Erbolatovich, PhD, Head of International Projects and Public Relations of the IAAR (Nur-Sultan).

(III) REPRESENTATION OF THE EDUCATION ORGANIZATION

Manash Kozybayev North Kazakhstan University is one of the oldest educational institutions of the Republic of Kazakhstan with an 83-year history, which was formed by the Resolution of the Cabinet of Ministers of the Republic of Kazakhstan dated 02.06.1994 No. 584 on the basis of the Petropavlovsk Pedagogical Institute named after K.D. Ushinsky, leading history since 1937. In the formation, development of one of the oldest educational institutions in the country, the following stages can be distinguished:

- 1937 - The opening of the Petropavlovsk Teachers' Institute on the basis of the resolution of the Council of People's Commissars of the Kazakh SSR dated March 19, 1937, due to the tasks of further developing the education system in the region. According to the order of the People's

Commissariat of Education of the Kazakh SSR No. 835 of July 25, 1937, classes began on September 1, 1937 at two faculties: natural-geographical and historical.

- 1938 - Opening of the extramural department of the Petropavlovsk Teachers' Institute.
- 1939 - The Petropavlovsk Teachers' Institute was awarded the status of a state.
- 1945 - The Petropavlovsk State Teachers' Institute was named after K.D. Ushinsky, the great teacher of the 19th century.
- 1955 - Reorganization of the Petropavlovsk State Teachers' Institute into the Petropavlovsk Pedagogical Institute.
- 1978 - Reorganization of the Petropavlovsk General Technical Faculty of the Ural Polytechnic Institute into the General Technical Faculty of the Karaganda Order of the Red Banner of Labor of the Polytechnic Institute with evening and extramural courses.
- 1982 - Formation of the Petropavlovsk branch of the Karaganda Polytechnic Institute.
- 1994 - Opening of the Higher Technical College on the basis of the Petropavlovsk branch of the Karaganda Polytechnic Institute.
- 1994 - Opening North Kazakhstan University on the basis of the Petropavlovsk Pedagogical Institute.
- 1996 - Consolidation of North Kazakhstan University and the Higher Technical College into a single higher educational institution - North Kazakhstan University.
- 2001 - By the Resolution of the Government of the Republic of Kazakhstan No. 163 dated January 31, 2001, North Kazakhstan University was awarded the status of a state university.
- 2003 - By the Resolution of the Government of the Republic of Kazakhstan No. 497 dated May 30, 2003, North Kazakhstan State University was named after Academician Manash Kozybayev.
- 2005 - Certification of the quality management system of the university for compliance with the requirements of ISO 9001: 2000.
- 2012 - Reorganization into the Republican State Enterprise on the right of economic management "North Kazakhstan State University named after Manash Kozybayev" of the Ministry of Education and Science of the Republic of Kazakhstan.

University mission: to be an intellectual center of education, science and culture, a driver of socio-economic development of Northern Kazakhstan.

University participation in rating programs:

M. Kozybayev NKU annually participates in the IQAA-Ranking, in the IQAA-Ranking of websites - according to the IQAA-Ranking in 2020, the university website entered the top 10 best websites and took the 6th place. At the same time, the site took the 4th place in terms of content and the 5th place in terms of the number of web pages. In addition, since 2018 M. Kozybayev NKU participates in the rating of "Atameken" RPE RK (36 EPs took 1,2,3 places). The university also takes part in the rating of the Independent Agency for Accreditation and Rating (IAAR), as a result of which 36 programs took 1,2,3 places.

The university participates in the QS Ranking, QS Emerging Europe and Central Asia (2020 - 301-350th place), in the international Webometrics ranking (2020 - 33rd place), In the ranking of higher educational institutions, the European Standard (ARES), which formed by the European Scientific and Industrial Chamber according to the standards of the European Union (2020 - 15th place (A)).

University awards

- European Quality Award, European Business Assembly, 2006;
- Diploma for participation in the quality award "Altyn Sapa 2007", Government of the Republic of Kazakhstan, 2007;
- National certificate "Industry Leader 2013", MES RK, 2013;

- Certificate of honor "For achievements in improving product quality and the degree of satisfaction of requests", Committee for Technical Regulation and Metrology of the Ministry of Investment and Development of the Republic of Kazakhstan, 2016

The Structure and the EP of the university:

According to the university website at M. Kozybayev NKU, recruitment was carried out for 57 educational bachelor's programs, 40 master's programs and 7 doctoral programs (<https://www.nkzu.kz/page/view?id=69>) in 2020-2021.

Today, there are 6 faculties in the university: "Mathematics and Natural Sciences", "History, Economics and Law", "Engineering and Digital Technologies", "Pedagogical", "Agrotechnological", "Foundation", as well as the Higher School of Medicine, the Institute of Language and literature, which includes 29 departments (<https://www.nkzu.kz/page/view?id=78>).

Library resources. Subdivisions of the library are located in four educational buildings of the university and occupy an area of 2293 m². The service system includes 5 reading rooms, a hall of the First President of the Republic of Kazakhstan, an electronic reading room, a catalog hall, a hall of rare and valuable literature, an information and bibliographic hall (335 seats), 7 subscriptions. The library is equipped with the necessary telecommunication equipment, communication facilities, the number of computer equipment totals 125 units, of which 93 are automated user workstations, have free access to the Internet. The library fund of the university totals as of 01.01.2020 - 1046552 copies, of which scientific literature - 101394 copies, educational - 871000 copies, fiction - 42035 copies, in foreign languages - 27770, on CD-carriers - 4353. The catalog contains 261315 bibliographic records. Taking into account the needs of students and teaching staff in relevant scientific publications of periodicals, 165 titles of magazines and newspapers were subscribed for the 1st half of 2020, of which 39 magazines in the Kazakh language, 28 newspapers - 10 titles, 5 magazines in a foreign language.

The contingent of the university students as of 01.11.2020. The contingent of full-time students as of November 01, 2020 is only 5564 people, of which: on the basis of a state educational grant - 3642. Distance learning students - 1161, evening form of study at the university in accredited EP is not carried out. Undergraduates - 321, of which 226 under government orders, 42 for doctoral students.

The university staff. The total number of full-time teachers at the university as of 01.11.2020 is 429 people, of which 9 are doctors of sciences, 119 candidates of sciences, 17 PhDs, 249 masters. The average age of teaching staff at the university is 45 years. Academic degree holders rate is 33.7%.

The students` contingent of the accredited EP as of November 01, 2020 is:

According to the new classifier and code:

- 6B01507 - "Geography-history" - 48 students, including in the state language -13, of which: on the basis of a state educational grant-29 people, distance learning students -1.
- 6B01508 - "Mathematics-Informatics" -33 students, including in the state language - 20, of which: on the basis of a state educational grant - 19 people, distance learning students - 13.
- 6B01509 - "Mathematics-Physics" - 60 students, including in the state language -39, of which: on the basis of a state educational grant - 57 people.
- 6B01510 - "Physics-Informatics" -41 students, including in the state language -23, of which: on the basis of a state educational grant-35 people, distance learning students -5
- 6B01511 - "Chemistry-Biology" -94 students, including in the state language -61, of which: on the basis of a state educational grant-91 people, distance learning students -3.

According to the old classifier and code:

- 5B0112900 - "Geography-History" - 60 students, including in the state language - 46, of which: on the basis of a state educational grant - 57 people.

- 5B0112700 - "Mathematics-Informatics" - 18 students, including 15 in the state language, of which: on the basis of a state educational grant -18 people.
- 5B012600 - "Mathematics-Physics" -17 students, including in the state language -11, of which: on the basis of a state educational grant - 17 people.
- 5B012800 - "Physics-Informatics" -5 students, including in the state language -4, of which: on the basis of a state educational grant-5 people.

Currently, the preparation of bachelors and masters in all EP is carried out on the basis of license No. 12016901 dated November 19, 2012, issued by the Committee for Control in Education and Science of the Ministry of Education and Science of the Republic of Kazakhstan dated July 19, 2019 No. 608

Information about the "Physics" department

The "Physics" Department trains specialists in the field of physics and is a structural unit of the Faculty of Mathematics and Natural Sciences. The bachelors and masters graduation in the educational programs 6B01510-Physics-Informatics, 6B050302-Astronomy and methods of remote research, 6B05302-Physics and astronomy, 7MB01503-Physics, 7M050302-Astronomy and methods of remote research is carried out.

The department activity is aimed at specialists training with deep theoretical and practical training, solid professional knowledge, skills and abilities that meet the state educational standards of higher and postgraduate education.

The department has a good material and technical base and a qualified teaching staff, which allows students to obtain professional high-quality knowledge and become specialists in the field of physics and methods of teaching physics.

In the 2020-2021 academic year the "Physics" department employs 12 teaching staff, the academic degree holders rate - 33%, of which: candidates of science – 4.

Information about the "Mathematics and Informatics" department

The "Mathematics and Informatics" department is a structural unit of the Faculty of Mathematics and Natural Sciences. The head of the department is the candidate of physical and mathematical sciences Tadzhitov A.A.

The "Mathematics and Informatics" department carries out training in the bachelor's degree program: 6B01501-Informatics, 6B01508-Mathematics-Informatics, 6B01509-Mathematics-Physics and Master's programs: 7M01501-Informatics, 7M01502-Mathematics.

The bachelors` preparation in the EP 6B01509 Mathematics-Physics is conducted in Kazakh and Russian languages.

In the 2020-2021 academic year, 22 teachers work in the "Mathematics and Informatics" department, including 8 candidates of sciences, 1 PhD doctor, the academic degree holders rate is 45%.

Information about the "Geography and Ecology" department

The EP 6B01507 (5B012900) Geography-History is carried out by two departments: "Geography and Ecology", "History of Kazakhstan and social and humanitarian disciplines".

The history of the development of the "Geography and Ecology", "IC and SRS" departments is inextricably connected with the history of M. Kozybayev North Kazakhstan University formation as one of the oldest educational institutions of the Republic of Kazakhstan.

The natural-geographical faculty began its existence from the moment of the release of the Decree of the Council of People's Commissars of the Kazakh SSR dated March 19, 1937 on the formation of a teacher's institute in Petropavlovsk with 2 faculties - history and natural-geographical. In 1938, a correspondence department with a specialization in Geography was opened in the Teachers' Institute.

The "Economic Geography", "Physical Geography" departments were created and students` training in the specialty "Geography and Ecology" began in 1989. In 1997, by combining the "Economic Geography" and "Physical Geography" departments, the "Geography and Ecology" department was created. In 2018, licenses were obtained for specialties 5B012900 "Geography and History".

The set according to the EP 6B01507 "Geography-History" has been carried out since 2018 (qualification - bachelor of education in geography and history). Since 2019, the EP has been assigned the code 6B01507 "Geography and History" (academic degree - Bachelor of Education in the specialty 5B012900 "Geography and History"). Specialists` training in this specialty is carried out both in full-time and in distance learning in the Russian and Kazakh languages.

Bachelors` preparation of the EP 6B01507 (5B012900) "Geography-History" is conducted in full-time and distance learning, in the state (Kazakh) and Russian languages.

The qualitative and quantitative staff of the department:

The department "Geography and Ecology" employs 14 teachers, including 2 professors, 3 associate professors, 7 senior teachers, 2 teachers. With an academic master's degree - 7 people. Candidates of Science - 7. The percentage of teaching staff with academic degrees and titles is 60%. 4 part-timers, 3 of them are masters, 1 candidate of sciences. The average age of the teaching staff at the department is 47 years.

The department "History of Kazakhstan and SRS" employs 15 teachers, including 1 professor, 5 - candidates of sciences, 5 associate professors, 9 - senior teachers and masters. The average age of the teaching staff at the department is 55 years.

Academic mobility for the accredited EP of the cluster for the period 2015-2020: During the same period, 13 teachers of the "Geography and Ecology" department passed training in various advanced training programs, which is 81% of the number of full-time teachers of the department.

Information about the "Chemistry and chemical technologies" department

The specialists` training of the accredited EP 6B01511 (5B012500) "Chemistry-Biology" 6B02101 is carried out at the "Chemistry and Chemical Technologies" Department. In 1957, a section of chemists was founded at the Petropavlovsk Pedagogical Institute, which was later transformed into the "Biology and Chemistry" department. In 1961, the "Chemistry" department was separated as an independent structural unit. In 2000 it was renamed into the "Organic Chemistry" and Chemistry of Macromolecular Compounds" department (Organic Chemistry and Chemistry of Naval Forces), and in 2016 - into the "Chemistry and Chemical Technologies" department. Over the years, the department has graduated in the following specialties: "Chemistry", "Chemistry and biology", "Chemical, forensic, environmental expertise", "Chemical technology of pharmaceutical production", "Chemical technology of organic substances", "Biology", "Biology and chemistry", "Biology"(natural), "Biotechnology", "Technology of food products". In 2018, a license was obtained (No. 12016901 of November 19, 2012) to conduct educational activities in the specialty 5B012500 "Chemistry and Biology". In different years (until 2004), training was already conducted in the specialties "Chemistry and Biology", "Biology and Chemistry". The academic degree obtained at the end of this EP is a bachelor of education in the educational program 6B01511 "Chemistry-Biology". Training of specialists in this specialty is carried out both in full-time and in correspondence courses in Russian, Kazakh and English (multilingual groups).

The qualitative and quantitative staff of the department:

In the 2020-2021 academic year there are 18 teaching staff as part of the "Chemistry and Chemical Technologies" department, the percentage of the academic degree holders rate is 55.6%, of which: doctors of sciences - 3, candidates of sciences - 6, PhD - 1. Teachers from the production organisations - 4 for the period 2018.

The teaching staff academic mobility according to the EP 6B01511 "Chemistry-Biology" for the period 2018-2020: incoming mobility - 2.

Research projects within the framework of grant funding for the department in the context of the EP 6B01511 "Chemistry-Biology":

"Commercialization of the technology of complex pulse-beam water purification for various purposes" (2017-2019); participation in the "Isolation from plants, identification and structural

modification of flavonoids - the basis of new medicinal substances" project (based on the "International Scientific and Production Holding "Phytochemistry" joint stock company) (2018-2020);" Creation of modified anti-corrosion, heat-resistant paints and varnishes, chemical-resistant and waterproofing purposes with the use of broad-spectrum surfactants" (2020-2022).

(IV) DESCRIPTION OF THE PREVIOUS ACCREDITATION PROCEDURE

Educational programs 6B01508 (5B012700) - "Mathematics-Informatics", 6B01509 (5B012600) - "Mathematics-Physics", 6B01511 (5B012500) - "Chemistry-Biology", 6B01507 (5B012900) - "Geography-History", 6B01280010) (5 - "Physics-Informatics" is being accredited in the IAAR for the first time.

(V) DESCRIPTION OF THE VISIT OF THE EEC

The EEC work was carried out on the basis of the approved Program of the visit of the expert commission for specialized accreditation of educational programs in M. Kozybayev NKU in the period from 09 to 11 November 2020.

In order to coordinate the EEC work, on November 8, 2020, an opening meeting was held, during which powers were distributed among the commission members, the schedule of the visit was clarified, and agreement was reached on the choice of examination methods.

To obtain objective information about the quality of educational programs and the entire infrastructure of the university, to clarify the content of self-assessment reports, online meetings were held with acting rector, vice-rectors of the university in areas of activity, heads of structural divisions, deans of faculties, heads of departments, teachers, students, graduates, employers. A total of 75 representatives took part in the meetings (Table 1).

Table 1 - Information about employees and students who took part in the meetings with the EEC of the IAAR:

Participant category	Number
Acting Chairman of the Management Board - Rector	1
Vice-rectors	3
Heads of structural divisions	19
Heads of departments, heads of EP	16
Teachers *	12
Students*	16
Graduates *	3
Employers *	5
Total	75

During the online excursion, the EEC members got acquainted with the state of the material and technical base, visited the Faculty of Mathematics and Natural Sciences, the robotics room (room 401/5). Laboratories: "Center for Physicochemical Research" (room 412/2), "Organic synthesis" (room 403/2), "Analytical chemistry" (room 404/2), "Nanotechnology and atomic force microscopy" (room 303/5), "Electricity and Magnetism" (room 309/5), "Mechanics and Molecular Physics" (room 311/5), "Mechanics, Molecular Physics, Electricity and Magnetism for Technical Specialties" (audit. 313/5), "Fundamentals of Electronics" (aud. 315/5), "Experimental Physics" (aud. 317/5), "Mechanics, Molecular Physics, Electricity and Magnetism for Technical Specialties" (aud. 320/5), room for teaching methods of physics (room 322/5), optics of atomic and nuclear physics (room 420/5).

At the online meeting of the IAAR EEC with the target groups of M. Kozybayev NKU carried out the clarification of the mechanisms for implementing the university policy and concretization of certain data presented in the university self-assessment report.

For the period of accreditation, distance classes were attended:

-in the discipline "Astronomy", the topic "Small bodies. Satellites of giant planets, their nature", lecture, 3 course, the EP 6B01510 - Physics and Informatics, teacher - Markova Agniya Georgievna.

- open lecture "Invariant subspaces. Eigenvalues and eigenvectors. Properties. Linear operators in Euclidean and unitary vector space" in the discipline "Algebra and number theory" for the 1st year students of the EP 6B01509 Mathematics-Physics passed at the proper methodological level. Teacher Voronina O.A. conducted the session using the zoom platform, applied interactive teaching methods using technical aids.

- in the discipline "Workshop on solving combined problems", a practical lesson in the zoom platform, 2 course, the EP 6B0151 - Chemistry-biology - teacher Aubakirova G.B. Ph.D. Small group work was used as active teaching methods in the class.

At the beginning of the training session, the teachers motivated the students for productive activities, clearly voiced the goals and objectives for the students. Classes are aimed at controlling knowledge on the previous topic and the formation of professional competencies in the academic discipline, verbal, visual (illustrations, presentations) teaching methods and a method of practical training (practical work) were used. Before carrying out practical work, the teachers used various types and forms of checking theoretical material, such as mutual checking, self-checking, as well as a differentiated approach, taking into account the preparedness of students.

Attending a lecture by Galina Vladimirovna Gordiyanova of the "Geography and Ecology" department in the GI-20 group, 10.11.2020 at 10.30 on the topic "self-education and its role in the professional development of a teacher".

The lesson was attended by 13 students. The distance lesson was held at a high level. The teacher used all the traditional methods of information technology, determined the plan and the questions to be presented for the lecture. In addition, he spoke about the goals and objectives that students must achieve before the end of the lesson. At the beginning of the lecture, the teacher deduced the basic conceptual apparatus that was used during the lecture.

During the lecture, the teacher used video materials and a presentation as visual material, which positively influenced the consolidation of the new material.

The teacher's personal qualities, imagination, thinking system, temperament leave an imprint on the nature of the lectures. The teacher used the logic of thinking and the interest of the students, but the voice was a little monotonous. Although, in general, the lecture was scientific, meaningful and the connection between theory and practice.

In general, the lesson had a clear structure and logic of disclosure. In addition to the evidence part, the teacher used in the lecture an obligatory condition of analytical, reasoned material, and also the lecture contained a sufficient number of examples, facts, justifications, the connection between history and modernity. In consolidating the lecture material, students answered frontal questions, the teacher achieved the goal and objectives.

During their work, the EEC members conducted online visits to the following practice bases: Comprehensive school-lyceum at the Higher College named after Magzhan Zhumabaev, Abay str., 28, school No. 26 named after Y. Kuibyshev, Benzostroy quarter, Severnaya street, 2, School-Lyceum named after Al-Farabi, Ya. Gashek str., 14, KSU "Secondary School No. 1 named after M. Aytkhozhin", Petropavlovsk, Vasilyeva st., 44, KSU "Regional specialized boarding school for gifted children "LORD", a chemistry teacher, Petropavlovsk, Zhalel Kizatov str. (Yubileynaya), 5.

In accordance with the accreditation procedure, an online survey was conducted of 80 teachers, 140 students, including junior and senior students.

In order to confirm the information presented in the Self-Assessment Report, external experts requested and analyzed the working documentation of the university. Along with this, the

experts studied the Internet positioning of the university through the official website of the university <https://www.nkzu.kz>.

As a part of the planned program, recommendations for improving the accredited educational programs of M. Kozybayev NKU, developed by the EEC based on the results of the examination, were presented at an online meeting with the leadership on 11.11.



(VI) COMPLIANCE WITH SPECIALIZED ACCREDITATION STANDARDS

6.1 "Management of the educational program" Standard

Strengths / Best Practice

For the EP: 6B01508 (5B012700) "Mathematics-Informatics", 6B01509 (5B012600) "Mathematics-Physics", 6B01511 (5B012500) "Chemistry-Biology", 6B01507 (5B012900) "Geography-History", 6B01510 (5B-012800) Informatics" - M. Kozybayev NKU has a published quality assurance policy that reflects the link between research, teaching and learning.

The EEC recommendations

For the EP: 6B01508 (5B012700) "Mathematics-Informatics", 6B01509 (5B012600) "Mathematics-Physics", 6B01511 (5B012500) "Chemistry-Biology", 6B01507 (5B012900) "Geography-History", 6B01510 ("5B-012800 Informatics"

- during the 2021/2022 academic year, ensure the passage of advanced training courses for the EP managers in the field of education management;

- by the end of the 2020/2021 academic year, the EP managers make changes to the EP development plan for risk management in the activities of departments for staffing, recruiting students and organizing the educational process;

- by the beginning of the 2021/2022 academic year, develop and proceed with the implementation of an innovation management plan and the implementation of innovative proposals in educational programs.

The EEC conclusions on the criteria:

For the EP 6B01508 (5B012700) - "Mathematics-Informatics", 6B01509 (5B012600) - "Mathematics-Physics", 6B01511 (5B012500) - "Chemistry-Biology", 6B01507 (5B012900) - "Geography-History", 6B01280010) (5B - "Physics-Informatics" have strong - 1, satisfactory - 13, suggesting improvement - 0.

6.2 "Information Management and Reporting" Standard

Strengths / Best Practice

For the EP: 6B01508 (5B012700) "Mathematics-Informatics", 6B01509 (5B012600) "Mathematics-Physics", 6B01511 (5B012500) "Chemistry-Biology", 6B01507 (5B012900) "Geography-History", 6B01510 (5B-012800) Informatics" - 0.

The EEC recommendations

For the EP: 6B01508 (5B012700) "Mathematics-Informatics", 6B01509 (5B012600) "Mathematics-Physics", 6B01511 (5B012500) "Chemistry-Biology", 6B01507 (5B012900) "Geography-History", 6B01510 (5B-012800) Informatics"-0.

The EEC conclusions on the criteria:

For the EP 6B01508 (5B012700) - "Mathematics-Informatics", 6B01509 (5B012600) - "Mathematics-Physics", 6B01511 (5B012500) - "Chemistry-Biology", 6B01507 (5B012900) - "Geography-History", 6B01280010) (5B - "Physics-Informatics" have strong - 0, satisfactory - 16, suggesting improvement - 0.

6.3 "Development and approval of the educational program" Standard

Strengths / Best Practice

For the EP: 6B01508 (5B012700) "Mathematics-Informatics", 6B01509 (5B012600) "Mathematics-Physics", 6B01511 (5B012500) "Chemistry-Biology", 6B01507 (5B012900) "Geography-History", 6B01510 ("5B-012800 Informatics")

- clearly defined and explained information to students about the qualifications obtained upon completion of the EP, corresponding to the level of NQS.

The EEC recommendations

For the EP: 6B01508 (5B012700) "Mathematics-Informatics", 6B01509 (5B012600) "Mathematics-Physics", 6B01511 (5B012500) "Chemistry-Biology", 6B01507 (5B012900) "Geography-History", 6B01510 ("5B-012800 Informatics") None.

The EEC conclusions on the criteria:

For the EP 6B01508 (5B012700) - "Mathematics-Informatics", 6B01509 (5B012600) - "Mathematics-Physics", 6B01511 (5B012500) - "Chemistry-Biology", 6B01507 (5B012900) - "Geography-History", 6B01280010 (5B - "Physics-Informatics" have strong - 1, satisfactory - 11, suggesting improvement - 0.

6.4 "Continuous monitoring and periodic evaluation of educational programs" Standard

Strengths / Best Practice

For the EP: 6B01508 (5B012700) "Mathematics-Informatics", 6B01509 (5B012600) "Mathematics-Physics", 6B01511 (5B012500) "Chemistry-Biology", 6B01507 (5B012900) "Geography-History", 6B01510 ("5B-012800 Informatics") -0.

The EEC recommendations

For the EP: 6B01510-Physics - Informatics -exclude from the ESC duplication of disciplines that have the same content and learning outcomes; - the key competencies described in the EP passport should be brought in line with the cycle of the GED SCES of higher education.

The EEC conclusions on the criteria:

For the EP 6B01508 (5B012700) - "Mathematics-Informatics", 6B01509 (5B012600) - "Mathematics-Physics", 6B01511 (5B012500) - "Chemistry-Biology", 6B01507 (5B012900) - "Geography-History", 6B01280010 (5B - "Physics-Informatics" have strong - 0, satisfactory - 9, suggesting improvement - 0.

6.5 "Student-centered learning, teaching and assessment of progress" Standard

Strengths / Best Practice

For the EP: 6B01508 (5B012700) "Mathematics-Informatics", 6B01509 (5B012600) "Mathematics-Physics", 6B01511 (5B012500) "Chemistry-Biology", 6B01507 (5B012900) "Geography-History", 6B01510 ("5B-012800 Informatics")-0.

The EEC recommendations

For the EP: 6B01508 (5B012700) - "Mathematics-Informatics", 6B01509 (5B012600) - "Mathematics-Physics", 6B01511 (5B012500) - "Chemistry-Biology", 6B01507 (5B012900) - "Geography-History", 6B01280010 (5B012800)) - "Physics-Informatics"

- by the beginning of the 2021/2022 academic year, the management of the accredited EP to develop criteria for assessing the results of the application of their own teaching methods.

The EEC conclusions on the criteria:

For the EP 6B01508 (5B012700) - "Mathematics-Informatics", 6B01509 (5B012600) - "Mathematics-Physics", 6B01511 (5B012500) - "Chemistry-Biology", 6B01507 (5B012900) - "Geography-History", 6B01280010 (5B - "Physics-Informatics" have strong - 0, satisfactory - 9, suggesting improvement - 1.

6.6 "Students" Standard

Strengths / Best Practice

For the EP: 6B01508 (5B012700) "Mathematics-Informatics", 6B01509 (5B012600) "Mathematics-Physics", 6B01511 (5B012500) "Chemistry-Biology", 6B01507 (5B012900) "Geography-History", 6B01510 ("5B-012800 Informatics")-0.

The EEC recommendations

For the EP: 6B01508 (5B012700) - "Mathematics-Informatics", 6B01509 (5B012600) - "Mathematics-Physics", 6B01511 (5B012500) - "Chemistry-Biology", 6B01507 (5B012900) - "Geography-History", 6B01280010 (5B012800)) - "Physics-Informatics"

- to develop an action plan to expand the external and internal mobility of EP students and start its implementation.

The EEC conclusions on the criteria:

For the EP 6B01508 (5B012700) - "Mathematics-Informatics", 6B01509 (5B012600) - "Mathematics-Physics", 6B01511 (5B012500) - "Chemistry-Biology", 6B01507 (5B012900) - "Geography-History", 6B01280010 (5B - "Physics-Informatics" have strong - 0, satisfactory - 14, suggesting improvement - 0.

6.7. "Teaching staff" Standard

Strengths / Best Practice

For the EP: 6B01508 (5B012700) "Mathematics-Informatics", 6B01509 (5B012600) "Mathematics-Physics", 6B01511 (5B012500) "Chemistry-Biology", 6B01507 (5B012900) "Geography-History", 6B01510 ("5B-012800 Informatics" -0

The EEC recommendations:

For the EP: 6B01508 (5B012700) - "Mathematics-Informatics", 6B01509 (5B012600) - "Mathematics-Physics", 6B01511 (5B012500) - "Chemistry-Biology", 6B01507 (5B012900) - "Geography-History", 6B01280010 (5B012800)) - "Physics-Informatics"

- The EP management to strengthen the staff by increasing the proportion of teachers with advanced degrees involved in the implementation of the EP.

- To develop and start implementing an action plan to expand the external and internal mobility of teaching staff in the context of the EP and to attract foreign and domestic teachers. - to organize the participation of teaching staff in international programs, in social projects, in republican and international competitions.

The EEC conclusions on the criteria:

For the EP 6B01508 (5B012700) - "Mathematics-Informatics", 6B01509 (5B012600) - "Mathematics-Physics", 6B01511 (5B012500) - "Chemistry-Biology", 6B01507 (5B012900) - "Geography-History", 6B01280010 (5B - "Physics-Informatics" have strong - 0, satisfactory - 9, suggesting improvement - 0.

6.8. "Educational resources and student support systems" Standard

Strengths / Best Practice

For the EP: 6B01508 (5B012700) "Mathematics-Informatics", 6B01509 (5B012600) "Mathematics-Physics", 6B01511 (5B012500) "Chemistry-Biology", 6B01507 (5B012900) "Geography-History", 6B01510 ("5B-012800 Informatics").-0.

The EEC recommendations:

For the EP: 6B01508 (5B012700) - "Mathematics-Informatics", 6B01509 (5B012600) - "Mathematics-Physics", 6B01511 (5B012500) - "Chemistry-Biology", 6B01507 (5B012900) - "Geography-History", 6B01280010 (5B012800) - "Physics-Informatics"

- the EP management to develop an action plan for further improvement of the university

infrastructure, taking into account the special needs of students (ramps, paths for the visually impaired, etc.).

- to replenish the library fund of the university and to form the provision of major disciplines of the EP with the latest textbooks and teaching aids in paper and electronic media, including in the Kazakh language.

The EEC conclusions on the criteria:

For the EP 6B01508 (5B012700) - "Mathematics-Informatics", 6B01509 (5B012600) - "Mathematics-Physics", 6B01511 (5B012500) - "Chemistry-Biology", 6B01507 (5B012900) - "Geography-History", 6B01280010 (5B - "Physics-Informatics" have strong - 0, satisfactory - 8, suggesting improvement - 0.

6.9. "Public Information" Standard

Strengths / Best Practice

For the EP: 6B01508 (5B012700) "Mathematics-Informatics", 6B01509 (5B012600) "Mathematics-Physics", 6B01511 (5B012500) "Chemistry-Biology", 6B01507 (5B012900) "Geography-History", 6B01510 ("5B-012800 Informatics"

- the leadership of the university provides support and explanation of the national development programs of the country, information on passing scores and educational opportunities provided to students in the system of higher and postgraduate education;

The EEC recommendations

For the EP: 6B01508 (5B012700) - "Mathematics-Informatics", 6B01509 (5B012600) - "Mathematics-Physics", 6B01511 (5B012500) - "Chemistry-Biology", 6B01507 (5B012900) - "Geography-History", 6B01280010 (5B012800) - "Physics-Informatics"

- The EP management ensure publication on the university website of all changes and actions taken in relation to the EP.

Additionally for the EP: 6B01511 (5B012500) - "Chemistry-Biology"

- The EP management of the 6B01511-Chemistry-Biology - to increase the publication activity in information networks and in the media.

The EEC conclusions on the criteria:

For the EP 6B01508 (5B012700) - "Mathematics-Informatics", 6B01509 (5B012600) - "Mathematics-Physics", 6B01511 (5B012500) - "Chemistry-Biology", 6B01507 (5B012900) - "Geography-History", 6B01280010 (5B - "Physics-Informatics" have strong - 1, satisfactory - 9, suggesting improvement - 0.

6.10. "Standards in the context of individual specialties" (Humanities) Standard

For the EP: 6B01508 (5B012700) "Mathematics-Informatics", 6B01509 (5B012600) "Mathematics-Physics", 6B01511 (5B012500) "Chemistry-Biology", 6B01507 (5B012900) "Geography-History", 6B01510 ("5B-012800 Informatics"-0.

The EEC recommendations

For the EP: 6B01510 (5B012800) - "Physics-Informatics"

- in the CED the EP 6B01510 (5B012800) - "Physics-Informatics" - to include disciplines in the course of theoretical physics.

The EEC conclusions on the criteria:

For the EP 6B01508 (5B012700) - "Mathematics-Informatics", 6B01509 (5B012600) - "Mathematics-Physics", 6B01511 (5B012500) - "Chemistry-Biology", 6B01507 (5B012900) - "Geography-History", 6B01280010 (5B - "Physics-Informatics" have strong - 0, satisfactory - 4, suggesting improvement - 0.

(VII) OVERVIEW OF STRENGTHS / BEST PRACTICES FOR EACH STANDARD

“Educational program management” Standard:

For the EP: 6B01508 (5B012700) "Mathematics-Informatics", 6B01509 (5B012600) "Mathematics-Physics", 6B01511 (5B012500) "Chemistry-Biology", 6B01507 (5B012900) "Geography-History", 6B01510 (5B-012800) Informatics"

- M. Kozybayev NKU has a published quality assurance policy that reflects the link between research, teaching and learning.

“Information Management and Reporting” Standard:

For the EP: 6B01508 (5B012700) "Mathematics-Informatics", 6B01509 (5B012600) "Mathematics-Physics", 6B01511 (5B012500) "Chemistry-Biology", 6B01507 (5B012900) "Geography-History", 6B01510 (5B-012800) Informatics". Not identified.

"Development and approval of the educational program" Standard:

For the EP: 6B01508 (5B012700) "Mathematics-Informatics", 6B01509 (5B012600) "Mathematics-Physics", 6B01511 (5B012500) "Chemistry-Biology", 6B01507 (5B012900) "Geography-History", 6B01510 (5B-012800) Informatics"

- clearly defined and explained information to students about the qualifications received upon completion of EP, corresponding to the level of NQS (confirmed by interviewing students).

"Continuous monitoring and periodic evaluation of educational programs" Standard:

For the EP: 6B01508 (5B012700) "Mathematics-Informatics", 6B01509 (5B012600) "Mathematics-Physics", 6B01511 (5B012500) "Chemistry-Biology", 6B01507 (5B012900) "Geography-History", 6B01510 (5B-012800) Informatics". Not identified.

"Student-centered learning, teaching and assessment of progress" Standard:

For the EP: 6B01508 (5B012700) "Mathematics-Informatics", 6B01509 (5B012600) "Mathematics-Physics", 6B01511 (5B012500) "Chemistry-Biology", 6B01507 (5B012900) "Geography-History", 6B01510 (5B-012800) Informatics". Not identified.

"Students" Standard:

For the EP: 6B01508 (5B012700) "Mathematics-Informatics", 6B01509 (5B012600) "Mathematics-Physics", 6B01511 (5B012500) "Chemistry-Biology", 6B01507 (5B012900) "Geography-History", 6B01510 (5B-012800) Informatics". Not identified.

"Teaching staff" Standard:

For the EP: 6B01508 (5B012700) "Mathematics-Informatics", 6B01509 (5B012600) "Mathematics-Physics", 6B01511 (5B012500) "Chemistry-Biology", 6B01507 (5B012900) "Geography-History", 6B01510 (5B-012800) Informatics". Not identified.

"Educational resources and student support systems" Standard

For the EP: 6B01508 (5B012700) "Mathematics-Informatics", 6B01509 (5B012600) "Mathematics-Physics", 6B01511 (5B012500) "Chemistry-Biology", 6B01507 (5B012900) "Geography-History", 6B01510 (5B-012800) Informatics". Not identified.

“Public Information” Standard

For the EP: 6B01508 (5B012700) "Mathematics-Informatics", 6B01509 (5B012600) "Mathematics-Physics", 6B01511 (5B012500) "Chemistry-Biology", 6B01507 (5B012900) "Geography-History", 6B01510 (5B-012800) Informatics"

- the leadership of the university provides support and explanation of the national development programs of the country, information on passing scores and educational opportunities provided by students in the system of higher and postgraduate education;

"Standards in the context of individual specialties" Standard:

For the EP: 6B01508 (5B012700) "Mathematics-Informatics", 6B01509 (5B012600) "Mathematics-Physics", 6B01511 (5B012500) "Chemistry-Biology", 6B01507 (5B012900) "Geography-History", 6B01510 (5B-012800) Informatics". Not identified.



(VIII) OVERVIEW OF QUALITY IMPROVEMENT RECOMMENDATIONS FOR EACH STANDARD

"Educational program management" Standard

For the EP: 6B01508 (5B012700) - "Mathematics-Informatics", 6B01509 (5B012600) - "Mathematics-Physics", 6B01511 (5B012500) - "Chemistry-Biology", 6B01507 (5B012900) - "Geography-History", 6B01280010 (5B012800) - "Physics-Informatics"

- during the 2021/2022 academic year, ensure the passage of advanced training courses for the EP managers in the field of education management;

- by the end of the 2020/2021 academic year, the EP managers make changes to the EP development plan for risk management in the activities of departments for staffing, recruiting students and organizing the educational process;

- by the beginning of the 2021/2022 academic year, develop and start implementing a plan for managing innovation and introducing innovative proposals into educational programs.

"Information Management and Reporting" Standard

For the EP: 6B01508 (5B012700) "Mathematics-Informatics", 6B01509 (5B012600) "Mathematics-Physics", 6B01511 (5B012500) "Chemistry-Biology", 6B01507 (5B012900) "Geography-History", 6B01510 (5B-012800) Informatics". Not identified.

"Development and approval of the educational program" Standard

For the EP: 6B01508 (5B012700) - "Mathematics-Informatics", 6B01509 (5B012600) - "Mathematics-Physics", 6B01511 (5B012500) - "Chemistry-Biology", 6B01507 (5B012900) - "Geography-History", 6B01280010 (5B012800)) - "Physics-Informatics"

- for the university administration - to develop a normative document regulating the development and implementation of double EP and determine the minimum amount of credits for mastering an additional specialty, based on the expected learning outcomes;

- to develop an action plan to harmonize the content of the EP with similar EPs of foreign and Kazakh universities in order to form and implement joint EP by 2023.

- The EP management must determine a list of disciplines, the content of which is aimed at preparing students for professional certification in all EP.

"Continuous monitoring and periodic evaluation of educational programs" Standard

For the EP: 6V01510-Physics-Informatics

- to exclude from the CED duplication of disciplines with the same content and learning outcomes;

- bring the key competencies described in the EP in line with the GED cycle.

"Student-centered learning, teaching and assessment of progress" Standard

For the EP: 6B01508 (5B012700) - "Mathematics-Informatics", 6B01509 (5B012600) - "Mathematics-Physics", 6B01511 (5B012500) - "Chemistry-Biology", 6B01507 (5B012900) - "Geography-History", 6B01280010 (5B012800)) - "Physics-Informatics"

- by the beginning of the 2021/2022 academic year, the management of the accredited EP to develop criteria for assessing the results of applying their own teaching methods.

"Students" Standard

For the EP: 6B01508 (5B012700) - "Mathematics-Informatics", 6B01509 (5B012600) - "Mathematics-Physics", 6B01511 (5B012500) - "Chemistry-Biology", 6B01507 (5B012900) - "Geography-History", 6B01280010 (5B012800) - "Physics-Informatics"

- Develop an action plan to expand the external and internal mobility of the EP students and start its implementation.

"Teaching staff" Standard

For the EP: 6B01508 (5B012700) - "Mathematics-Informatics", 6B01509 (5B012600) - "Mathematics-Physics", 6B01511 (5B012500) - "Chemistry-Biology", 6B01507 (5B012900) - "Geography-History", 6B01280010 (5B012800) - "Physics-Informatics"

- The EP management - to strengthen the staff by increasing the proportion of teachers with advanced degrees involved in the implementation of the EP.

- To develop and start implementing an action plan to expand the external and internal mobility of teaching staff in the context of the EP and to attract foreign and domestic teachers.

- to organize the participation of teaching staff in international programs, in social projects, in republican and international competitions.

"Educational resources and student support systems" Standard

For the EP: 6B01508 (5B012700) - "Mathematics-Informatics", 6B01509 (5B012600) - "Mathematics-Physics", 6B01511 (5B012500) - "Chemistry-Biology", 6B01507 (5B012900) - "Geography-History", 6B01280010 (5B012800) - "Physics-Informatics"

- the EP management - to develop an action plan for further improvement of the university infrastructure, taking into account the special needs of students (ramps, paths for the visually impaired, etc.).

- to replenish the library fund of the university and to form the provision of major disciplines of the EP with the latest textbooks and teaching aids in paper and electronic media, including in the Kazakh language.

"Public Information" Standard

For the EP: 6B01508 (5B012700) - "Mathematics-Informatics", 6B01509 (5B012600) - "Mathematics-Physics", 6B01511 (5B012500) - "Chemistry-Biology", 6B01507 (5B012900) - "Geography-History", 6B01280010 (5B012800) - "Physics-Informatics"

- The accredited EP management - to ensure publication on the university website of all changes and actions taken in relation to the EP. Additionally for the EP: 6B01511 (5B012500) - "Chemistry-Biology"

- the EP management of 6B01511-Chemistry-Biology - to increase publication activity in information networks and in the media.

"Standards in the context of individual specialties" Standard

For the EP: 6B01510-Physics-Informatics

- to include disciplines in the course of theoretical physics in the CED EP 6B01510-Physics-Informatics.

Appendix 1. Evaluation table "Conclusion of the external expert commission" (6B01508 (5B012700) - "Mathematics-informatics", 6B01509 (5B012600) - "Mathematics-physics", 6B01511 (5B012500) - "Chemistry-Biology", 6B01507 (5B012900) - "Geography-History", 6B01510 (5B012800) - "Physics-Informatics")

№	№	Assessment Criteria	Position of the organization of education			
			Strong	Satisfactory	Suggests improvement	Unsatisfactory
Standard of "Educational program Management»						
1	1.	The University must have a published quality assurance policy.	+			
2	2.	Quality assurance policies should reflect the relationship between research, teaching, and learning.		+		
3	3.	The University must demonstrate the development of a culture of quality assurance, including in the context of the educational program.		+		
4	4.	Commitment to quality assurance should apply to any activity performed by contractors and partners (outsourcing), including joint/double-degree education and academic mobility.		+		
5	5.	The management of the educational program ensures transparency in the development of the educational program development plan based on the analysis of its functioning, the real positioning of the University and the orientation of its activities to meet the needs of the state, employers, interested persons and students.		+		
6	6.	Leadership of the educational program demonstrates the functioning of the mechanisms of formation and regular revision of the development plan of OP and monitor its implementation, evaluate achievement of learning objectives, meet the needs of students, employers and society, decision-making aimed at continuous improvement of educational programs.		+		
7	7.	The management of the educational program must demonstrate the individuality and uniqueness of the educational program development plan, its consistency with national development priorities and the development strategy of the educational organization.		+		
8	8.	The management of the educational program must demonstrate the individuality and uniqueness of the educational program development plan, its consistency with national development priorities and the development strategy of the educational organization.		+		
9	9.	The University must demonstrate a clear definition of those responsible for business processes within the educational program, an unambiguous distribution of staff responsibilities, and differentiation of functions of collegial bodies.		+		
10	10.	The management of the educational program must provide evidence of the transparency of the educational program management system.		+		

11	11.	The management of the educational program must demonstrate the successful functioning of the internal quality assurance system of the educational program, including its design, management and monitoring, their improvement, and fact-based decision-making.		+		
12	12.	The management of the educational program should manage risks.		+		
13	13.	The management of the educational program should ensure the participation of representatives of interested persons (employers, faculty, students) in the collegial management bodies of the educational program, as well as their representation in making decisions on the management of the educational program. The University must demonstrate innovation management within the educational program, including analysis and implementation of innovative proposals		+		
14	14.	The management of the educational program must demonstrate evidence of openness and accessibility for students, teachers, employers and other interested parties.		+		
15	15.	The management of the educational program must demonstrate evidence of openness and accessibility for students, teachers, employers and other interested parties		+		
Total by standard			1	14	0	
Standard of «Information Management and reporting»						
16	1.	The University should ensure the functioning of the system for collecting, analyzing and managing information based on the use of modern information and communication technologies and software		+		
17	2.	The management of the educational program should demonstrate the systematic use of processed, adequate information to improve the internal quality assurance system.		+		
18	3.	Within the framework of the educational program, there should be a system of regular reporting that reflects all levels of the structure, including an assessment of the effectiveness and efficiency of departments and research.		+		
19	4.	The University must establish the frequency, forms and methods of evaluating the management of the educational program, the activities of collegial bodies and structural divisions, senior management, and the implementation of scientific projects.		+		
20	5.	The University must demonstrate the definition of the procedure and ensuring the protection of information, including the identification of responsible persons for the accuracy and timeliness of information analysis and data provision.		+		
21	6.	An important factor is the involvement of students, employees and teaching staff in the processes of collecting and analyzing information, as well as making decisions based on them.		+		
22	7.	The management of the educational program must demonstrate that there is a mechanism for communication with students, employees, and other stakeholders, including mechanisms for conflict resolution.		+		
23	8.	The University must measure the degree of satisfaction with the needs of the faculty, staff and students in the educational program and demonstrate evidence of elimination of the identified shortcomings.		+		
24	9.	The University should evaluate the effectiveness and efficiency of its activities, including in the context of the educational program.		+		

25	10.	Information collected and analyzed by the University should take into account:		+		
		Key performance indicators;				
26	11.	dynamics of the contingent of students in the context of forms and types;		+		
27	12.	level of academic performance, achievement of students and the dismissal;		+		
28	13.	students ' satisfaction with the implementation of the educational program and the quality of education at the University;		+		
29	14.	availability of educational resources and support systems for students;		+		
30	15.	employment and career development of graduates.		+		
31	16.	Students, employees, and teaching staff must document their consent to the processing of personal data.		+		
Total by standard			0	16	0	
Standard of «Development and approval of educational programs»						
32	1.	The University must define and document the procedures for developing the educational program and their approval at the institutional level		+		
33	2.	The management of the educational program must ensure that the educational program results meet the set goals, including the expected learning outcomes.		+		
34	3.	The management of the educational program should ensure that there are developed models of the graduate of the educational program that describe learning outcomes and personal qualities.		+		
35	4.	The management of the educational program must demonstrate the conduct of external examinations of the educational program.		+		
36	5.	The qualifications obtained at the end of the educational program must be clearly defined, explained and correspond to a certain level of the NQS.	+			
37	6.	The management of the educational program should determine the impact of disciplines and professional practices on the formation of learning outcomes.		+		
38	7.	An important factor is the ability to prepare students for professional certification.		+		
39	8.	The management of the educational program must provide evidence of the participation of students, faculty and other stakeholders in the development of the educational program, ensuring their quality.		+		
40	9.	The complexity of the educational program should be clearly defined in Kazakhstan credits and ECTS.		+		
41	10.	The management of the educational program should ensure the content of academic disciplines and learning outcomes at the level of education (bachelor's, master's, doctoral).		+		
42	11.	The structure of the educational program should include various types of activities that correspond to the results of training.		+		
43	12.	An important factor is the availability of joint educational programs with foreign educational organizations.		+		

Total by standard			1	11	0	
Standard of «Continuous monitoring and periodic evaluation of educational programs»						
44	1.	The University should monitor and periodically evaluate the educational program in order to ensure that the goal is achieved and meet the needs of students and society.		+		
		The results of these processes are aimed at continuous improvement of the educational program.				
45	2.	The content of programs in the light of the latest scientific achievements in a particular discipline to ensure the relevance of the discipline taught;		+		
46	3.	changes in the needs of society and the professional environment;		+		
47	4.	load, academic performance and graduation of students;		+		
48	5.	effectiveness of student assessment procedures;		+		
49	6.	expectations, needs and satisfaction of students with the training program;		+		
50	7.	educational environment and support services, and their compliance with the goals of the educational program.		+		
51	8.	The University and the management of the educational program must provide evidence of participation of students, employers and other stakeholders in the revision of the educational program.		+		
52	9.	All interested parties should be informed of any planned or taken actions in relation to the educational program. All changes made to the educational program must be published.		+		
Total by standard			0	9	0	
Standard of «Student-Centered learning, teaching and assessment of academic performance»						
53	1.	The management of the educational program should ensure respect and attention to different groups of students and their needs, providing them with flexible learning paths.		+		
54	2.	The management of the educational program should ensure the use of various forms and methods of teaching and learning.		+		
55	3.	An important factor is the availability of their own research in the field of teaching methods of academic disciplines of the educational program.		+		
56	4.	The management of the educational program should demonstrate the existence of a feedback system for the use of various teaching methods and evaluation of learning outcomes.			+	
57	5.	The management of the educational program should demonstrate support for the autonomy of students, while providing guidance and assistance from the teacher.		+		
58	6.	The management of the educational program must demonstrate that there is a procedure for responding to student complaints.		+		
59	7.	The University must ensure consistency, transparency and objectivity of the learning outcomes assessment mechanism for each educational program, including appeal.		+		
60	8.	The University must ensure that the procedures for evaluating the learning outcomes of students in the educational program correspond to the planned learning outcomes and goals of the		+		

		program. Evaluation criteria and methods for the educational program should be published in advance.				
61	9.	The University should determine the mechanisms for ensuring that each graduate of the educational program learns the results of training and ensure the completeness of their formation.		+		
62	10.	Evaluators should be familiar with modern methods of evaluating learning outcomes and regularly improve their skills in this area.		+		
Total by standard			0	9	1	
Standard "Students"						
63	1.	The university must demonstrate the policy of forming the contingent of students from admission to graduation and ensure the transparency of its procedures. The procedures governing the life cycle of students (from admission to completion) must be defined, approved, published.		+		
		The management of the educational program must demonstrate the implementation of special adaptation and support programs for newly admitted and foreign students.				
64	2.	The university must demonstrate the compliance of its actions with the Lisbon Recognition Convention.		+		
65	3.	The university should cooperate with other educational organizations and national centers of the "European Network of National Information Centers for Academic Recognition and Mobility / National Academic Recognition Information Centers" ENIC / NARIC in order to ensure comparable recognition of qualifications.		+		
66	4.	The management of the educational program must demonstrate the existence and application of a mechanism for recognizing the results of academic mobility of students, as well as the results of additional, formal and non-formal education.		+		
67	5.	The university should provide an opportunity for external and internal mobility of students of the educational program, as well as assist them in obtaining external grants for training.		+		
68	6.	The management of the educational program should make the maximum amount of effort to provide students with places of practice, facilitate the employment of graduates, and maintain communication with them.		+		
69	7.	The university must provide graduates of the educational program with documents confirming the acquired qualifications, including the achieved learning outcomes, as well as the context, content and status of the education received and evidence of its completion.		+		
70	8.	An important factor is monitoring the employment and professional activities of graduates of the educational program.		+		
71	9.	The leadership of the educational program should actively stimulate students to self-education and development outside the main program (extracurricular activities).		+		
72	10.	An important factor is the existence of an active alumni association / association.		+		
73	11.	An important factor is the availability of a support mechanism for gifted students.		+P		
74	12.	The university must demonstrate the policy of forming the contingent of students from admission to graduation and ensure the transparency of its procedures. The procedures governing the life cycle of students (from admission to completion) must be defined, approved, published.		+		

75	13.	The management of the educational program must demonstrate the implementation of special adaptation and support programs for newly admitted and foreign students.		+		
76	14.	The university must demonstrate the compliance of its actions with the Lisbon Recognition Convention.		+		
Total by standard			0	14	0	
Standard "Teaching staff"						
77	1.	The university must have an objective and transparent personnel policy, including recruitment, professional growth and development of personnel, ensuring the professional competence of the entire staff.		+		
78	2.	The University must demonstrate that the human faculty resources potential of the University development strategy and the specifics of the educational program..		+		
79	3.	The management of the educational program must demonstrate awareness of responsibility for their employees and providing them with a favorable working environment.		+		
80	4.	The leadership of the educational program must demonstrate the change in the role of the teacher in connection with the transition to student-centered learning.		+		
81	5.	The university should determine the contribution of the faculty of the educational program to the implementation of the development strategy of the university, and other strategic documents.		+		
82	6.	The university should provide opportunities for career growth and professional development for the faculty of the educational program.		+		
83	7.	The leadership of the educational program should involve practitioners of the relevant industries in teaching.		+		
84	8.	The leadership of the educational program must ensure targeted actions for the development of young teachers.		+		
85	9.	The university should demonstrate the motivation for the professional and personal development of teachers of the educational program, including the encouragement of both the integration of scientific activity and education, and the use of innovative teaching methods.		+		
Total by standard			0	9	0	
Norm "Educational resources and students support systems"						
86	1.	EP management must demonstrate the sufficiency of material and technical resources and infrastructure.		+		
87	2.	The EP's management must demonstrate the existence of procedures for supporting various groups of students, including information and counseling.		+		
		The EP management must demonstrate the compliance of information resources with the EP specifics, including compliance with:				
88	3.	technological support for students and teaching staff in according with educational programs (for example, online training, modeling, databases, data analysis programs);		+		
89	4.	library resources, including the fund of educational, methodological and scientific literature on general education, basic and profiling disciplines on paper and electronic media, periodicals, access to scientific databases;		+		

90	5.	examination of research results, graduation works, dissertations for plagiarism;		+		
91	6.	access to educational Internet resources;		+		
92	7.	functioning of WI-FI on the territory of the educational organization.		+		
93	8.	The university should strive to ensure that the educational equipment and software used for developing EP are similar to those used in the respective industries.		+		
Total by standard			0	8	0	
Public awareness Standard						
		The information published by the university in the pressing matters of the EP must be accurate, objective, relevant and must include:				
94	1.	implemented programs, indicating expected learning outcomes;		+		
95	2.	information on the possibility of qualifying at the end of the EP;		+		
96	3.	information about teaching, learning, assessment procedures;		+		
97	4.	information about passing points and learning opportunities provided to students;	+			
98	5.	information about employment opportunities for graduates.		+		
99	6.	The EP's management should use a variety of ways to disseminate information (including mass media, web resources, information networks, etc.) to inform the general public and stakeholders.		+		
100	7.	Public awareness should support and explain the country's national development programs and the system of higher and postgraduate education.		+		
101	8.	The university must publish audited financial statements on its own web resource.		+		
102	9.	The University must demonstrate the reflection on the web resource of information that characterizes the University generally and in the context of EP		+		
103	10.	An important factor is the availability of adequate and objective information about the teaching staff of the EP, in the context of personalities.		+		
Total by standard			1	9	0	
Standards in the context of individual specialties						
EDUCATION						
Образовательные программы направления «Образование», такие как «Химия-Биология», «Математика-Физика», «Математика-Информатика», «Физика-Информатика», «География-История», должны отвечать следующим требованиям:						
104	1.	Educational programs in the field of "Education" must meet the following requirements:		+		
105	2.	Leadership of the educational program must demonstrate the graduates of theoretical knowledge in psychology and skills in communications, analysis of personality and behavior, methods of prevention and resolution of conflict, motivation of students;		+		

106	3.	The management of the educational program must demonstrate the literacy of graduates of the program in the field of information technology.		+		
107	4.	The management of the educational program must demonstrate the presence of disciplines in the program that teach innovative teaching methods and training planning, including interactive teaching methods, teaching methods with high involvement and motivation of students (games, case studies/situations, use of multimedia tools);		+		
Total by standard			0	4	0	
IN TOTAL			4	102	1	

