

MINISTRY OF AGRICULTURE REPUBLIC OF KAZAKHSTAN  
NJSC "KAZAKH AGROTECHNICAL RESEARCH UNIVERSITY named after .  
S.SEIFULLIN"

Reviewed  
at the meeting  
faculty council  
Protocol № 5 dated 26.12.2023 y

Affirm:  
Dean of the Faculty  
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PLAN DEVELOPMENT OF THE EDUCATIONAL PROGRAM  
7M08304 — «Rational utilization of natural bioresources»  
for 2024-2028

Reviewed at an expanded meeting of the Department of Hunting and Fisheries

Protocol № 5 dated 1.12.2023 y.

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## 1. Passport

Development plan of educational program - 7M08304-«Rational use of natural bioresources» for 2024-2028 years

1	Basis for development of the OP development plan	Strategy and subject matter of the development plan of the EP, in accordance with the educational policy of the Republic of Kazakhstan, the purpose of which is to prepare competitive in the labor market specialists of a new formation, possessing broad fundamental knowledge and practical experience, possessing modern methods of protection, control of reproduction and regulation of the use of wildlife and their habitat, as well as all types of hunting, including the provision of services in this area and production of hunting and fur farming products, taking into account the requirements of the requirements of the following areas
2	Main developers of the OP development plan	<p>1. Syzdykov Kuanysh Nygmanovich – Associate Professor of the Department of Game Science and Fisheries, Candidate of Veterinary Sciences</p> <p>2. Serik Narbaev – Associate Professor of the Department of Game Science and Fisheries, Candidate of Agricultural Sciences</p> <p>3. Asylbekova Ainur Serikbaevna - Associate Professor of the Department of Game Science and Fisheries, Candidate of Agricultural Sciences</p> <p>Employers:</p> <p>1. Isakhaev Bakhytzhan Akparovich - Inspector of the Sapsan operational group. RGKP PO Okhotzoprom of the Committee for Forestry and Wildlife of the MENR of the Republic of Kazakhstan, Master of Agricultural Sciences</p> <p>2. Berber Alexander Petrovich - senior researcher at the Wildlife of Kazakhstan LLP, candidate of biological sciences</p>
3	Timeframe for implementation of the OP	2024-2028yy.
4	Amount and sources of financing	Financing from the state budget, attraction of external sources of financing
5	Expected final results of the RP development plan implementation	Training of highly qualified specialists in the field of 7M08304-«Rational use of natural bioresources» in accordance with the requirements of domestic and world standards.

## 2 Analytical substantiation of the program

Updated content of the OP; high quality of graduates training; realization of the OP with the addition of in-depth training taking into account the cognitive ability and needs of students.

### 2.1 Information about the educational program

The educational program 7M08304-"Rational use of natural bioresources" is aimed at the processes of formation of professional and personal development goals for mastering modern problems of biology, mastering the methodology of scientific research and experiments in the study of biological systems of different levels of complexity and organization, independently acquire and use new knowledge and skills and choose and master new research methods, it is reasoned to implement setting and developing scientific problems, adapting modern achievements of science and high-tech technologies to the educational process, independently working with special literature.

The educational program is developed in accordance with the National Qualification Framework and professional standards, agreed with the Dublin descriptors and the European Qualification Framework.

The importance of the EP for the national economy is determined by the fact that it trains specialists for the labor market to ensure the rational use of natural bioresources of the country.

Educational programs contain theoretical training, including the study of cycles of general education, basic and profile disciplines; additional types of training, professional practice, intermediate and final certification. The volume of the EP is 120 credits, including 88 credits of theoretical training, 24 credits of undergraduate research work, 8 credits of final certification.

### 2.2 Analysis of the student body

At present 7M08304 - "Rational use of natural bioresources" - 1 master's student.

#### Information about students in the 2023-2024 school year

№ п/п	Indicators	2023-2024
7M08304-«Rational use of natural bioresources»		
1	Contingent of undergraduates, total:	1
2	Number of master's students studying under state grants	1
3	Number of master students studying in the state language	
4	Number of master's students studying on a paid basis	-

### 2.3 Analysis of the internal environment of educational programs (availability of personnel, logistical, information, financial resources)

To implement the above educational programs at the department provides access of each student to databases and library funds formed by the full list of disciplines (modules). During independent training students are provided with access to the information-telecommunication network «Internet». Each student is provided with printed and electronic publications for each discipline and each interdisciplinary course (including electronic databases of periodicals).

The library fund is equipped with printed and electronic editions of the main and additional educational literature on disciplines of all academic cycles, published for the last 5-10 years, as well as reference and bibliographic and periodicals, Russian and domestic journals. The Information and Library Center has a computer room with open access to the Internet. The information and functional system includes several components: the catalog of books and articles of the University Information and Library Center based on the program «MAPK-SGL», working in real time with the help of an automated cataloguer's workplace, the catalog of own developments in full-text mode, electronic resources, Internet resources. Through the Internet in the information and library center there is a connection to the content on hunting, agriculture, electronic library system of publishing house «Lan».

Educational and methodical documents for the specialty are developed in accordance with the existing normative documents such as the state obligatory standards of education, standard curricula for the specialty, developed working curricula, academic calendars, EUMKD for all areas of study, as well as the relevant documentation for the training of bachelors, masters and doctoral students. The direction of preparation of master's and doctoral theses corresponds to the topics of scientific research of the department (funded projects and initiative topics of scientific research).

Particular attention is paid to such issues as increasing the tenure of faculty members, their professional development courses in domestic universities near and far abroad, research institutions, as well as the invitation of leading specialists of the Ministry of Agriculture of the Republic of Kazakhstan, scientists from higher educational institutions abroad.

#### ***2.4 Analysis of the external environment of educational programs (analysis of the demand for educational programs, analysis of graduate employment, analysis of the competitive environment)***

On EP «Rational use of natural bioresources» (master's degree) employers are:

1 Isakhaev Bakhytzhon Akparovich M.Sc. in Agricultural Sciences, Inspector of operational group Peregrine Falcon. RGKP PO Okhotzooptom of the Committee of Forestry and Wildlife of the MENR RK

2 Berber Alexander Petrovich - Senior Researcher, Candidate of Biological Sciences LLP «Wildlife of Kazakhstan».

There are 6 contracts with economic entities, where the students undergo practical training. The list of farms is given below:

- 1 Karkarala State National Natural Park
- 2 Aksu-Zhabagly State Natural Reserve
- 3 RGU «State National Natural Park «Kokshetau»
- 4 RGU «State National Natural Park «Burabai»
- 5 RGCP «PO Okhotzooptom»
- 6 RGU «Korgalzhyn State Nature Reserve»

Master students undergo research training in the countries of neighboring countries (Vyatka State Agrotechnological University, Irkutsk State Agricultural Academy named after A.A. Ezevsky (Russia).

In 2023, undergraduate Suleimenova A. completed an internship at the Kyrgyz National Agrarian University named after K.I. Scriabin, Bishkek.

**2.5 Analysis of teaching staff implementing the educational program (Assessment of the qualifications of teaching staff implementing the OP, as well as the distribution of job responsibilities within the program. Teaching staff internships, advanced training, research (specify topics related to the OP, where they are registered, etc.), conclusion: compliance with qualification requirements, analysis of student satisfaction and teaching staff)**

The implementation of educational programs 7M08304 – «Rational use of natural biological resources» is carried out by the university teaching staff in accordance with the cycle of basic and core disciplines.

Sedateness according to EP 7M08304 – «Rational use of natural biological resources»

Academic year	Sedateness according to EP 7M08304 - “Rational use of natural biological resources”, %
2023-2024	100

Employees of the department for the period from 2020 to 2023. underwent advanced training at the Irkutsk State Agricultural Academy named after A.A. Ezhevsky (Karagoishin Zh.M., master’s student Pazyl T.).

The teaching staff of the OP "Hunting and Animal Husbandry" took advanced training courses in Almaty on the platform of the scientific center "Global Professional Development": in 2022, Burshakbayeva L.M., Kazikhanova S.R., Arynova R.A., Bekeeva S.A., Narbaev S.N.

**2.6 Analysis of students' achievements (achievements of students in educational, scientific, and other fields)**

The department conducts scientific research on contractual topics, in which students directly participate. In 2019, scientific work was carried out on "Development of a biological justification for the artificial breeding and introduction of the common pheasant (*Phasianus colchicus*) in the green zone of Nur Sultan" and "Development of a biological justification for breeding and reproduction of representatives of the order of diurnal birds of prey (Falconiformes) peregrine falcon, gyrfalcon, saker falcon". In 2020, the scientific work "Biological justification for the artificial breeding and introduction of common quail (*Coturnix coturnix*) and grey partridge (*Pedix pedix*) in the territories of the green belt of Nur Sultan" was carried out. The topics of the students' theses correspond to these areas of scientific research.

In accordance with the requirements of the labor market and at the suggestion of employers, new elective disciplines are being introduced into work curricula and catalogs of elective disciplines.

### 3 SWOT analysis of the internal and external environment

Strengths	Weaknesses
1. Compliance of the content of the educational programs of the State Educational Institution with modern requirements of science and	1. The lack of double-degree education with foreign universities. 2. Insufficient involvement of

<p>consumers, as well as their regular updating, due to constant changes in the needs of the graduate's competence, processes and economic integration;</p> <p>2. Step-by-step planning of the process of mastering educational programs according to the trajectory independently chosen by students in accordance with the rules of the credit system of education;</p> <p>3. The combination of theoretical and practical training, independent work in educational programs, as well as the availability of compulsory and elective disciplines, including components for preparing for professional activity, the development of intellectual skills, creative abilities and personality of the student;</p> <p>4. Development and introduction into the educational process of innovative forms, methods of mastering educational programs, multimedia tools that provide training for highly qualified specialists;</p> <p>5. Improvement of the intra-university quality management system, the presence of structures for monitoring and monitoring the effectiveness of students' development of educational programs;</p> <p>6. Interdisciplinary communication.</p> <p>7. Provision of computers and Internet access, updating of the library fund.</p>	<p>foreign scientists for lectures.</p> <p>3. Lack of scientific projects in the field of hunting and animal husbandry.</p> <p>4. The work on concluding contracts with business entities is not active enough.</p>
<b>Opportunities</b>	<b>Threats</b>
<p>1. The ability of educational programs to bring them to a new high-quality level, including the international level.</p> <p>2. Cooperation of agricultural universities of the republic in the training of specialists, exchange of experience in improving the effectiveness of educational programs.</p>	<p>1. The high cost of educational services compared to the average market price offered by competing universities.</p>

#### **4 The main goals and objectives of the Development Plan with indications of terms and stages of its development**

The development plan for master's degree educational programs according to EP 7M08304 – «Rational use of natural biological resources» was developed based on requests from employers.

The purpose of the educational program is to train competitive, in the labor market, specialists of new formation, possessing broad fundamental knowledge and practical experience, possessing modern methods of protection, control of reproduction

and regulation of use of wildlife and their habitat, as well as all types of hunting, including the provision of services in this area and production of hunting and animal husbandry products, taking into account the requirements of employers. Providing economic entities of the Republic of various forms of ownership with highly qualified specialists possessing high theoretical and practical skills, capable of implementing the following principles as: - priority of practice-oriented knowledge; - orientation to the development of local and regional community; - formation of the need for continuous development and innovative activity in the professional sphere, including continuing education; - formation of readiness to make decisions and act professionally in non-standard situations.

The main objectives of the Development Plan are the following:

№	Name of the task	Deadlines	Stages of completion
1	Improving and improving the conditions for obtaining a full-fledged, high-quality professional education	Development of measures to improve educational services for the development of professional skills	The entire period of study
2	Development of an EP in accordance with the state mandatory standard of higher education and a classifier of personnel training areas that form the main professional competencies of future specialists in hunting and animal husbandry	When updating the content of the OP, include disciplines recommended by employers and competencies.	The entire period of study
3	Creating prerequisites for independent search and research activities of the student within the framework of the experiment at all stages of training	The inclusion of research and experimental work in the study of EP	The entire period of study
4	Development of measures for mastering the work with scientific and technical information using domestic and foreign experience in professional activities	Carrying out activities for the analysis and processing of the results obtained	The entire period of study



5	Organization of consultations between employers and scientists of the Research Institute in the selection of relevant and practically significant topics of master's theses	Creation of a list of relevant and practically significant topics, taking into account the proposals of employers and taking into account the research work of the department (state budget programs).	The beginning of training on OP 7M08304- "Rational use of natural bioresources"
6	Involvement of students in the research work of the department, by including them in research programs.	The inclusion of students in the staff of grant programs.	The entire period of study
7	Implementation of research internships in universities of the Republic of Kazakhstan and foreign universities	Conclusion of contracts with universities	The entire period of study

### 5 Measures to reduce risks for EP

Risk reduction in the implementation of the OP is an important aspect of the OP development plan. It requires a strategic approach that includes risk identification, the development and implementation of controls, as well as continuous monitoring and improvement. These measures will help ensure the effectiveness of the implementation of the OP, as well as improve its competitiveness in the educational services market.

The following measures are used in the implementation of educational programs to reduce risks

№ п/п	Name of possible risks	Measures to eliminate them
1	Insufficient provision of educational and methodological literature on professional disciplines in the state and English languages	To plan the annual release by scientists and teaching staff of scientific and educational literature in the state and English languages, according to the working curriculum of students
2	Preferential conduct of classes in the traditional way	To improve and introduce innovative technologies of teaching and providing educational services at the level of world standards into the educational process
3	Possible depreciation and possible depreciation of educational and laboratory facilities	Creation of modern educational, research and laboratory facilities based on public-private partnership, purchase of modern laboratory equipment
4	Insufficiency of scientific and pedagogical staff in connection with the retirement of individual	Training of highly qualified scientific personnel through master's and doctoral studies (PhD) at the level of modern

	employees	requirements
5	Small academic groups of students in Russian	Formation of a contingent of students of this profile through career guidance and information and advertising work, creation of multilingual learning groups

## 6 Activities for the development of the educational program

The educational program development plan is developed on the basis of the strategic development plan of the university and is the main document for defining and solving the problems of the educational program.

### Master's Degree Program Development Plan:

#### Development plan for OP 7M08304-"Rational use of natural bioresources"

№	Name of the target indicator	Unit of measurement	Terms of implementation					Expected results	Resource provision
			2024	2025	2026	2027	2028		
1	Formation of the Academic Committee for educational programs	Month.	IX	IX	IX	IX	IX	The academic committee will be approved by the order of the Rector of the university	
2	Determination of the competencies of the Master's degree in the disciplines of the OP	Month.	V	V	V	V	V	The competencies of the EP will be determined	
2.1	Developing a common position on the competencies of educational programs with employers	Month.	V	V	V	V	V	Common positions on OP competencies with employers will be developed	
2.2	Development of a common position on the content of disciplines of educational programs with employers	Month.	VI	VI	VI	VI	VI	Common positions on the content of the disciplines of the OP with employers will be developed	
2.3	Formation and coordination of EP competencies and disciplines with Dublin descriptors	Month.	VI	VI	VI	VI	VI	The competencies of the OP disciplines will be formed according to the Dublin descriptors	

3	Formation of educational programs in accordance with professional standards	Month.	VI	VI	VI	VI	VI	The educational program is formed in accordance with professorial standards
4	Preparation of the academic calendar and the working curriculum of educational programs	Month.	VI	VI	VI	VI	VI	An academic calendar and a working curriculum have been compiled.
5	Consideration of educational programs at an extended meeting of the department with the participation of employers	Month.	VI	VI	VI	VI	VI	The OP will be considered at an expanded meeting of the department with the participation of employers
6	Consideration and approval of educational programs at the Academic Council of the Faculty	Month.	VI	VI	VI	VI	VI	The OP will be reviewed and approved by the Academic Council of the faculty

**The list of recommended target indicators of the development plan OP 7M08304 -  
-"Rational use of natural bioresources"**

№	Name of the target indicator	Unit of measurement	Terms of implementation				
			2024	2025	2026	2027	2028
<b>Quantitative indicators</b>							
1*	The total number of students	dude.	2	3	3	4	4
2	The number of students accepted for training under the state educational order	dude.	2	3	3	4	4
3*	The share of Altyn Belgi students, winners of international Olympiads and competitions of scientific projects of the last three years, winners of presidential, republican Olympiads and competitions of scientific projects of the current academic year (awarded diplomas of 1,2,3 degrees) from their total number	%	-	-	-	-	-
4*	Number of foreign students		-	-	-	-	-
5*	The share of graduates employed in the 1st year after graduation (of the total number of graduates)	%	100	100	100	100	100
6	The number of students studying within the framework of academic mobility (external)	dude.	-	-	-	-	1
7*	Number of students enrolled in academic mobility (internal)	dude.	-	-	-	-	1
8	The number of students enrolled in double-degree education	dude.	-	-	-	-	1
9	• The number of students studying in English	ed	-	-	-	-	-
<b>Direction 1 Improvement of academic activities/improvement of the content of the EP</b>							
10	Development/updating of an OP based on professional standards with the participation of employers	ed	1	1	1	1	1
11*	Passage of specialized accreditation/ post-accreditation in agencies that are full members of international European	number of EP	1	1	1	1	1

	networks for ensuring the quality of education and included in the register of the authorized body in the field of education						
12	Development of joint and double-degree educational programs	number of EP	-	-	-	1	-
13*	The positions of the educational program in the ratings (Atameken, NAAR, QS, etc.)	place	2	2	1	1	1
14	The introduction of innovative teaching methods into the educational process	ed (act of implementation)	1	-	-	1	1
15*	Number of textbooks and teaching aids	ed	1	1	2	2	2
16*	The number of contracts with employers in practice	ed	2	2	2	2	2
<b>Direction 2 Development of human resources</b>							
18*	The number of teaching staff who have completed advanced training in the profile of the disciplines taught (72 hours)	ed	2	2	2	3	3
19*	Number of teaching staff who have completed advanced training/internships in inclusive education (72 hours)	number of ППЦ	-	-	1	-	1
20	Number of teaching staff/ percentage of teaching staff who have completed advanced training in foreign universities, research institutes	Dude/ %	-	-	1	1	1
21*	Number of teaching staff/ percentage of teaching staff who have completed internships	dude./ %	-	1	1	2	2
22*	The number of practitioners involved in lectures	dude.	1	2	2	2	2
23	The number of attracted domestic teachers within the framework of internal academic mobility	dude.	-	-	1	1	1
24*	The number of attracted teaching staff from abroad	dude.	-	1	1	1	1
25	Number of teaching staff/ percentage of teaching staff teaching in English	dude./ %	-	-	-	1/9	1/9
26	• Number of teaching staff/ percentage of teaching staff with international certificates confirming proficiency in a foreign language	dude./ %	-	-	-	1/9	1/9
<b>Direction 3. Development of research potential</b>							
27	The share of citations of scientists' publications in the Scopus database of the total number of citations of scientists of the Republic of Kazakhstan in	%	15	15	15	15	15
28	The number of publications in rating publications according to information resources on the Web of Science platform	ed	-	-	-	-	-
29*	The share of teaching staff participating in educational and research projects from the total number of teaching staff	%	35	35	40	40	40
30*	The number of startup projects implemented by teaching staff and students	ed	-	-	-	1	1
31*	The number of scientists who have completed internships in the world's leading scientific centers within the framework of the 500 Scientists program	ed	-	1	1	1	1
32*	The number of patents obtained within the framework of research, implemented at the expense of the state budget	ed	-	-	1	1	1
33*	The share of projects carried out jointly with OVPO and research organizations of the Republic of Kazakhstan from the total number of scientific projects	%	30	30	30	30	30
34*	Number of publications in KOKSNVO	ed	4	4	5	6	6
35*	The share of income received from innovative developments and commercialized projects of the university	number of	1	1	-	-	-
36*	Number of copyright certificates, patents	number of	-	1	1	1	1
37	The number of students who have won Olympiads, research competitions, etc.	ed	2	3	3	3	3
38*	The proportion of undergraduates and doctoral students involved in research activities	%	80	90	100	100	100
<b>Direction 4. Improvement of infrastructure and material and technical base</b>							

39	The number of laboratories introduced (updated)	ed	-	-	-	-	-
40	Number/Share of disciplines in which online courses (MOOCs) have been developed	ed / %	-	-	-	-	-
41	Number/Share of updated scientific equipment	ed / %	30	30	30	30	30
	Replenishment of the library fund	ed / %	25	30	30	30	30

\* - required indicator

## 7 The mechanism of implementation of the OP development plan

The development of an OP development plan provides an integrated approach to the implementation of activities aimed at achieving the set goal through solving formulated specific tasks, and contributes to the full implementation of planned activities. Monitoring of the implementation of the Development Plan is carried out by analyzing and summarizing information on the implementation of development indicators in the following areas. Based on the results of the monitoring, the Academic Committee prepares a report on the implementation of the Development Plan. The report is drawn up in any form, sent to the Dean of the faculty and is the basis for compiling the annual report of the faculty within the framework of strategic indicators and results for evaluating the Development Strategy of the university as a whole. When compiling a report, it is recommended to reflect the following information:

- 1) analysis and synthesis of the information provided in the Development Plan of the OP;
- 2) on the degree of achievement of the planned performance indicators (if there are deviations of the actual results from the planned
- 3) in case of revision of individual goals, objectives, activities, reallocation of resources, and development of new approaches to solving problems, information on them;
- 4) to improve the effectiveness of the implementation of the OP plan and proposals for making changes to the development plan;
- 5) the degree of influence on the implementation of the goals and objectives of the OP of external stakeholders. The processes of formation, monitoring and implementation of the OP development plan should be based on the principles of openness and transparency. The OP development plan should be posted on the official website of the university. Any interested persons have the right to familiarize themselves with the development plan and its interim results. The development plan of the educational institution and the progress of its implementation are discussed at meetings of departments, meetings of collegial bodies of the faculty, meetings with employers, open seminars, meetings with active students and other events.

Head of the department

Aubakirova G.A