NCJSC «L.N. GUMILYOV EURASIAN NATIONAL UNIVERSITY»

EDUCATION PROGRAM

Program Level:Bachelor's degree

Code and names of areas of training:

6B052-Environment

<u>6B05208 – Ecology and nature management</u> (Code and name of education programme)

Admission 2022

Typical period of study: 4 year **Awarded degree:** 6 NQF, 6 EQF

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	1 Passport of Education Program
Applicationarea	The educational program is intended for the training of personnel - ecologists for
	industry-specific industrial enterprises and ecological services for monitoring,
	monitoring the quality of the natural environment and human health.
Codeandnameofeducationprogram	6B05208 – Ecology and nature management
Regulatory and legal support	Law "On Education" of the Republic of Kazakhstan
	State General Education Standard on higher education (31.10.2018, №604)
	Standard Rules for the Activities of Educational Organizations that Implement Study Programs of Higher and (or) Postgraduate Education (30.10.2018 №595)
	Rules for the Organization of the Educational Process on the Credit Technology of Education (12.10.2018, №563)
	Classifier of Areas of Training with Higher and Postgraduate Education (13.10.2018 N_{2569})
	Of the Ministry of Health and Social Development of the Republic of Kazakhstan dated December 4, 2015 No. 10-3-16 / 29781 RK 2015
	Environmental Code of the Republic of Kazakhstan. Code of the Republic of Kazakhstan dated January 2, 2021 No. 400 - VI LRK.
	Profile Map of Education Program
Objective of Education Program	Training qualified specialists in the field of ecology, environmental protection and
· · · · · · · · · · · · · · · · · · ·	environmental management on the principles of close integration of science, education and innovation.
Concept of education program	The educational program is designed to master the necessary basic and professional
concept of education program	skills for their application in the field of environmental protection.
	Graduate Qualification Characteristics
Degree Awarded:	Bachelor of Natural Sciences under the educational programme "6B05208 - Ecology and nature management"
ListofSpecialist'sPositions	Environmentalist by industry, environmental technician; environmental inspector;
Listonopecialist si ositions	environmental technician; environmental engineer; instructor in recreation and tourism;
	environmental education technician; instructor (specialist) in environmental education;
	technician of specially protected natural territories; inspector of specially protected
	natural territories; environmental scientist in research institutions, manager, environmental expert.
AreaofProfessionalActivity	Production, environmental service and monitoring, monitoring of environmental quality
	and human health.
ObjectofProfessionalActivity	Territorial environmental protection departments, national parks, reserves, reserves,
	biosphere reserves, industrial enterprises, agro-industrial complexes, landfills, energy
	facilities, nuclear power plants.
FunctionsofProfessionalActivity	Expert-analytical: Takes part in the development of state programs for the development of economic sectors in the sections of environmental protection and environmental
	assessment and eco-audit.
	Organizational and management: provides Advisory services to the population on
	environmental issues; participates in environmental monitoring.
	Production: collects material and conducts laboratory studies of the level of
	environmental pollution; takes part in the preparation of the environmental passport of
	enterprises and in research in the field of ecology.

Universalcompetences (UC)	Result of training (UC units)	Names of Courses that Form Results of Training (units of competences)
UCA –To use modern communication tools and technologies	\mathbf{RT}_{1} -to get into communication in oral and written forms in Kazakh, Russian and foreign languages in order to solve problems of interpersonal, intercultural, and professional interactions; \mathbf{RT}_{2} -to usedigital technologies, various types of information and communication technologies for search, storage, processing, protection, and dissemination of information, as well as to apply economic knowledge in various spheres of activity	 Foreign language Kazakh (Russian) language Digital technologies by branches of application Information and communication technology Entrepreneurship and business Businessrhetoric
UC_B –ability to assess various situations based on a holistic systemic scientific worldview	\mathbf{RT}_3 – to apply philosophical knowledge for the formation of world view, to analyze the main stages and patterns of the historical development of society in order to increase civic engagement.	 Modern history of Kazakhstan Rukhani Zhangyru Philosophy Social and Political Knowledge Module
UC _C – ability to form and define a person in a social environment and focus on a healthy lifestyle	\mathbf{RT}_{4} -know the basics of a full-fledged social and professional activity through physical culture, demonstrate a safety culture, analyze and evaluate sources of environmental hazards, and be able to organize life safety conditions; \mathbf{RT}_{5} – demonstrate a sufficient level of legal awareness, fulfill professional duties and principles of behavioral culture and ethical norms of communication.	 Physical Training Anti-corruption culture Fundamentals of ecology and life safety
General Professional Competences (GPC)	Result of training (GPC units)	Names of Courses that Form Results of Training (units of competences)
GPC _A . Ability to use the principles of functioning and evolution of ecological systems, the role and importance of socio-economic factors, components of the biosphere and the biosphere as a whole to solve environmental problems	\mathbf{RT}_6 -Demonstrate basic knowledge of the basic laws of the functioning of ecosystems and the biosphere as a whole, the purpose and classification of environmental monitoring and its individual units and methods of observation.	5.Chemistry

2 Map/ ProfileofCompetences

	RT ₇ –Know about regional and global environmental problems, requirements of international and republican legislation in the field of environmental protection; understand the development trends of modern business, its significance for the ecology of the region; analyze, assess environmental problems in the field of economic management and production; compile information on the anthropogenic impact on the environmental apply methods for assessing environmental risk	 Ecological metrology and Biometry Bioindicator methods of research Evolution of the biosphere Medical Ecology Industrial ecology Population ecology and biocenology Macroecosystem Ecology Protection of natural resources Habitat and human ecology Institutional support of environmental protection
	RT ₈ -Identify possible ways to restore disturbed areas; analyze knowledge about the ecological capacity of natural systems and the limits of their sustainability; know the principles and be able to organize an environmental impact assessment of territories, production and technological projects; know the principles of formation and evaluate the dynamics and development of natural-anthropogenic geosystems of various ranks.	 Ecological toxicology Biogeochemical monitoring Digital environmental research processing methods Methods of geoecological researches Environmentalstudies Biogeochemical provinces Urboecology Ecological Geology Ecology of aquatic ecosystems Protection of natural resources Ecologycal resource science Environmental regulation and examination
ProfessionalCompetences (PC)	Result of Training (PC units)	Names of Courses that Form Results of Training (units of competences)
PCA -The ability to use data on the methodological and environmental-economic basis for assessing the impact of industrial facilities on the environment	processes, synthesize knowledge for the successful formation of labor resources	 Waste management Greenhouse gas management

\mathbf{RT}_{10} -Identify and describe the main local, regional, global environmental	1. Environmental engineering
problems, choose rational solutions to eliminate violations of the structure	2.Ecologicalaudit
and functions of ecosystems, own methods and ecological-economic bases	3. Ecological safety and forecasting
of environmental impact assessment; master the basics of modern	
information technology;	13. Environmental Impact Assessment
- apply the collection, storage and processing of environmental information;	14. Ecological zoning and sensing
	15.Paleoecology
	16.Climatology and meteorology in ecology
	17. Ecology of Kazakhstan

3 The content of the education program

Module Name and Code	Course Code	CourseName	Cycle, Compon	ion		The		of hours by types of ecupations		ces	ça O
			ent	Language of instruction	Total of credits	Lectures	Seminars	LaboratoryClasses CIW	Type of control Developed competences Department in charge		Department in charge
				Semester 1		1.22	T			1	
HIST 11001 Modern history of Kazakhstan	MHK 1101	Modern history of Kazakhstan	GCD CC	Kazakh	5	30	15	105	SE	UC _B	History of Kazakhstan
ENGL 11103 Foreign language 1	FL 1103 (1)	Foreign language1	GCD CC	English	5		45	105	Exam	UCA	Foreign Languages Department
KAZK 11104 Kazakh language 1	KL1104 (1)	Kazakh language 1	GCD CC	Kazakh	5		45	105	Exam	UC ₁	Practical Kazakh language
RUSS 11104 Russian language1	RL1104 (1)	Russian language1	GCD CC	Russian							Department of Russian
EDUC 22001 Social and Political Knowledge Module	SPKM 1107	Social and Political Knowledge Module	GCD CC	Kazakh/ Russian	8	30	60	150	Exam	UC _B	Political Science Sociology Philosophy SRS
PhCS 14114 Physical Training	PhT 1111(1)	Physical Training	GCD CC	Kazakh/ Russian	2		30	30	Differen -tiated attestati on	UCc	Physical training and sports
ECOL 12001 Introduction to the specialty	IS1201	Introduction to the specialty	BD UC	Kazakh/ Russian	5	15	30	105	Exam	GPCA	DMEFEP
			Semester	2							
CSSE 11005 Information and communication technologies	ICT 1105	Information and communication technologies	GCD CC	English	5	15	30	105	Exam	UCA	Computer science department
ENGL 11203 Foreign language 2	FL 1103 (2)	Foreign language 2	GCD CC	English	5		45	105	Exam	UCA	Foreign Languages Department
KAZK 11204 Kazakh language 2	KL1104 (2)	Kazakh language 2	GCD CC	Kazakh	5		45	105	Exam	UC1	Practical Kazakh language
RUSS 11204 Russian language2	RL1104 (2)	Russian language2	GCD CC	Russian							Department of Russian

PhCS 14214 Physical Training	PhT 1111 (2)	Physical Training	GCD CC	Kazakh/ Russian	2		30		30	Differen -tiated attestati on	UC _C	Physical training and sports
ECOL 12002 Biodiversity of biocenoses	BB 1202	Biodiversity of biocenoses	BD UC	Kazakh/ Russian	5	30	15		105	Exam	GPCA	DMEFEP
EDIN 22015	EP 1205	Educational practice	BD UC	Kazakh/	3					Report		DMEFEP
Educational practice				Russian Chooseone								
ECOL 13001	BCTE 1203	Biological components of the	BD EC	Kazakh/	5	15	30		105	Exam	GPCA	DMEFEP
Biological components of the environment		environment		Russian							or on	
HIM 13002	Him 1204	Chemistry	BD EC	Kazakh/	5	15	15	15	105	Exam	GPCA	Department of
Chemistry		Total credits	for 1st more	Russian	(0	150	480	15	1155			Chemistry
		1 otal credits	for 1 ^{ss} year		60	150	480	15	1155			
				Semester 3								
PHIL 21002 Philosophy	Phil 2102	Philosophy	GCD CC	Kazakh/ Russian	5	30	15		105	Exam	UCB	Philosophy
PhCS 14115 Physical Training	PhT 2111 (3)	Physical Training	GCD CC	Kazakh/ Russian	2		30		30	Differen -tiated attestati on	UCc	Physical training and sports
	•			Choose one								
ECOL 23001 Animals and plantsecology	APE2201	Animals and plantsecology	BD EC	Kazakh/ Russian	5	15	30		105	Exam	GPCA	DMEFEP
ECOL 23002 Biogeochemical monitoring	BM 2202	Biogeochemical monitoring	BD EC	Kazakh/ Russian	5	15		30	105	Exam	GPCA	DMEFEP
	1	T	1	Choose one	-	-		1	-	1	1	I
ECOL 23003 Bioecology	BE 2203	Bioecology	BD EC	Kazakh/ Russian	6	30	30		120	Exam	GPCA	DMEFEP
ECOL 23004 Ecological toxicology	ET 2204	Ecological toxicology	BD EC	Kazakh/ Russian	6	30	30		120	Exam	GPCA	DMEFEP
	1	T	1	Choose one				1		1	1	T
ECOL 23005 Ecological metrology and Biometry	EMB 2205	Ecological metrology and Biometry	BD EC	Kazakh/ Russian	6	30	30		120	Exam	GPCA	DMEFEP
ECOL 23006 Digital environmental research processing methods	DERPM 2206	Digital environmental research processing methods	BD EC	Kazakh/ Russian	6	30	30		120	Exam	GPCA	DMEFEP
EG01 02005	D) (D 2207		DD 70	Choose one		00	20	T	1.00	5	an a	
<i>ECOL 23007</i> Bioindicator methods of	BMR 2207	Bioindicator methods of research	BD EC	Kazakh/ Russian	6	30	30		120	Exam	GPCA	DMEFEP

research											
ECOL 23008 Ecological Geology	EG 2208	Ecological Geology	BD EC	Kazakh/ Russian	6	30	30	120	Exam	GPCA	DMEFEP
		I		Semester 4		<u> </u>			I		
PhCS 14215 Physical Training	PhT 2111 (4)	Physical Training	GCD CC	Kazakh/ Russian	2		30	30	Differen -tiated attestati on	UCc	Physical training and sports
				Choose one							-
ECON 22001 Entrepreneurship and business	EB 22207	Entrepreneurship and business	GCD EC	Kazakh/ Russian	5	30	15	105	Exam	UCA	Economics and Entrepreneurship
CSSE 22002 Digital technologies by branches of application	DTBA 2108	Digital technologies by branches of application	GCD EC	Kazakh/ Russian	5	30	15	105	Exam	UCA	Computer science department
COMU 22003 Businessrhetoric	BR 2108	Businessrhetoric	GCD EC	Kazakh/ Russian	5	30	15	105	Exam	UC _B	Department of Theoretika and Applied Linguistics
ECLFST 22004 Fundamentalsofecologyandl ifesafety	FELS 2108	Fundamentals of ecology and life safety	GCD EC	Kazakh/ Russian	5	30	15	105	Exam	UCc	DMEFEP
CULS 22005 Rukhani Zhangyru	RZh 2108	Rukhani Zhangyru	GCD EK	Kazakh/ Russian	5	30	15	105	Exam	UCB	History of Kazakhstan
LAWS 22006 Anti-corruption culture	ACC2108	Anti-corruption culture	GCD EC	Kazakh/ Russian	5	30	15	105	Exam	UC _C	Theory and history of state and law, constitutional law
			Uni	iversitycompone	ent						
ECOL 22001 Ecological biogeography	EB 2209	Ecological biogeography	BD UC	Kazakh/ Russian	5	30	15	105	Exam	GPCA	DMEFEP
ECOL 22002 Socialecology	SE 2210	Socialecology	BD UC	Kazakh/ Russian	5	15	30	105	Exam	GPCA	DMEFEP
				Choose					1		
ECOL 23009 Evolution of the biosphere	EB 2211	Evolution of the biosphere	BD EC	Kazakh/ Russian	5	30	15	105	Exam	GPCA	DMEFEP
ECOL 23010 Environmental studies	LAE 2212	Environmental studies	BD EC	Kazakh/ Russian	5	30	15	105	Exam	GPCA	DMEFEP
				Choose one		_					
ECOL 23011 Medical Ecology	ME2213	Medical Ecology	BD EC	Kazakh/ Russian	5	15	30	105	Exam	GPCA	DMEFEP
ECOL 23012 Biogeochemical provinces	BP2214	Biogeochemical provinces	BD EC	Kazakh/ Russian	5	15	30	105	Exam	GPCA	DMEFEP

INEX 22026	IP 2215	Industrial practice	BD UC		3					Report		
Industrial practice	11 2213	industrial practice	BB 00		5					nepon		
The second se		Total credits fo	or 2 nd vear		60	255	360	30	1155			
			•	Semester 5								
ECOL 32001	SE 3201	Soil ecology	BD UC	Kazakh/	5	15		30	105	Exam	GPCA	DMEFEP
Soil ecology				Russian/English								
ECOL 32002	GE3202	Geoecology	BD UC	Kazakh/	5	30	15		105	Exam	GPCA	DMEFEP
Geoecology				Russian/English								
				Choose one								
ECOL 33001	IE 3203	Industrial ecology	BD EC	Kazakh/Russian/	5	30	15		105	Exam	РСв	DMEFEP
Industrial ecology				English								
ECOL 33002	UE 3204	Urboecology	PD EC	Kazakh/	5	30	15		105	Exam	GPCA	DMEFEP
Urboecology			_	Russian/English								
				Choose one								
ECOL 33003	PEB 3205	Population ecology and biocenology	PD EC	Kazakh/	5	30	15		105	Exam	GPCA	DMEFEP
Population ecology and				Russian/English								
biocenology												
ECOL 33004	MGR 3206	Methods of geoecological	PD EC	Kazakh/	5	30	15		105	Exam	GPCA	DMEFEP
Methods of geoecological		researches		Russian/English								
researches												
FCOL 22005	ME 2207			Choose one	5	15	1	20	105	E.	CDC	DMEED
ECOL 33005 Macroecosystem Ecology	ME 3207	Macroecosystem Ecology	PD EC	Kazakh/ Russian/English	5	15		30	105	Exam	GPCA	DMEFEP
ECOL 33006	EAE 3208	Ecology of aquatic ecosystems	PD EC	Kazakh/	5	15		30	105	Exam	GPCA	DMEFEP
Ecology of aquatic				Russian/English								
ecosystems												
			1	Choose one						1	1	1
ECOL 33007	PNR3209	Protection of natural resources	PD EC	Kazakh/	5	15	30		105	Exam	GPCA	DMEFEP
Protection of natural				Russian/English							РСв	
resources ECOL 33008	RUNR 3210	Rational use of natural resources	PD EC	Kazakh/	5	15	30		105	E	CDC	DMEFEP
Rational use of natural	KUNK 5210	Rational use of natural resources	PDEC	Russian/English	5	15	30		105	Exam	GPCA	DMEFEP
resources				Russian/English								
105001005		<u> </u>	I	Semester 6	I	1	·	<u> </u>		<u> </u>	<u> </u>	
ECOL 32003	EM 3301	Ecological monitoring	PD UC	Kazakh/	6	30	30		105	Exam	PCA	DMEFEP
Ecological monitoring	-			Russian/English								
ECOL 33016	GM 3303	Greenhouse gas management	PD EC	Kazakh/	6	30	30		120	Exam	PCA	DMEFEP
Greenhouse gas				Russian/English								
management				, , , , , , , , , , , , , , , , , , ,								
INEX 32050	IP 3217	Industrial practice	BD UC		3					Report		
Industrial practice												
		Choice	ofmodulmo	jorEPorMinorcatal	(15	(atth avea						

			Ν	IodulofmajorEP								
ECOL 33009	HHE 3211	Habitat and human ecology	BD EC	Kazakh/	5	15	30		105	Exam	GPCA	DMEFEP
Habitat and human ecology				Russian/English								
ECOL	ISEP3212	Institutional support of	BD EC	Kazakh/	5	15	30		105	Exam	GPCA	DMEFEP
Institutional support of		environmental protection		Russian/English								
environmental protection												
ECOL 33011	WM3214	Waste management	BD EC	Kazakh/	5	15	30		120	Exam	<i>GPC</i> _A	DMEFEP
Waste management				Russian/English								
ECOL 33012	ER 3214	Ecologycal resource science	BD EC	Kazakh/	5	15	30		105	Exam	GPCA	DMEFEP
Ecologycal resource science				Russian/English								
ECOL 33013	ERE 3215	Environmental regulation and	BD EC	Kazakh/	5	15	30		105	Exam	GPCA	DMEFEP
Environmental regulation		examination		Russian/English								
and examination												
ECOL 33014	EPE 3216	Environmental engineering	BD EC	Kazakh/	5	15	30		120	Exam	GPCA	DMEFEP
Environmental engineering				Russian/English								
				Module Minor								
		Minor 1	BD EC	Kazakh/	5					Exam	GPCA	
				Russian/English								
		Minor 2	BD EC	Kazakh/	5					Exam	GPCA	
				Russian/English								
		Minor 3	BD EC	Kazakh/	5					Exam	PCA	
				Russian/English								
				Choose one								
ECOL 33015	EA 3302	Ecologicalaudit	PD EC	Kazakh/	6	30	30		120	Exam	PCA	DMEFEP
Ecologicalaudit				Russian/English								
		Total credits f	for 3 rd year		60	240	315	60	1185			
				semester 7								
ECOL 42001	SE 4301	System Ecology	PD UC	Kazakh/	5	15	30		105	Exam	PCA	DMEFEP
System ecology				Russian/English								
	<u> </u>			Choose one								
ECOL 43001	ESF 4302	Ecological safety and forecasting	PD EC	Kazakh/	5	15	30		105	Exam	PCA	DMEFEP
Ecological safety and	LSF 4302	Ecological safety and forecasting	FDEC	Russian/English	5	15	50		105	Exam	PCA	DIVIEFEP
forecasting				Kussian/English								
ECOL 43002	RE4303	Recreational Ecology	PD EC	Kazakh/	5	15	30		105	Exam	PCA	DMEFEP
Recreational Ecology	NE+303	Recreational Leology	IDEC	Russian/English	5	15	50		105	Елат	r CA	DIVIEFEF
	L	1	1	Choose one	1	1	1	I	1	1	1	
ECOL 43003	MEM4304	Mechanisms of environmental	PD EC	Kazakh/	5	15	30		105	Exam	PCA	DMEFEP
		management		Russian/English	2				100		I CA	
Mechanisms of	1		1		1			1			1	1
Mechanisms of environmental management				-								
Mechanisms of environmental management ECOL 43004	AIE4305	Environmental Impact Assessment	PD EC	Kazakh/	5	15	30		105	Exam	PCA	DMEFEP

Assessment												
				Choose one		1						-
ECOL 43005 Environmental biotechnology	EB 4306	Environmental biotechnology	PD EC	Kazakh/ Russian/English	5	15	30		105	Exam	PCA	DMEFEP
ECOL 43006 Ecological zoning and sensing	EZ 4307	Ecological zoning and sensing	PD EC	Kazakh/ Russian/English	5	15	30		105	Exam	РСА	DMEFEP
	L			Choose one							1	
ECOL 43007 Climate change and the «green» economy.	CCGE 4308	Climate change and the «green» economy.	PD EC	Kazakh/ Russian/English	5	15	30		105	Exam	PCA	DMEFEP
ECOL 43008 Paleoecology	Pale 4309	Paleoecology	PD EC	Kazakh/ Russian/English	5	15	30		105	Exam	PCA	DMEFEP
	•		•	Choose one					•	•	•	
ECOL 43009 Mutagenesis and environment	ME4310	Mutagenesis and environment	PD EC	Kazakh/ Russian/English	5	15	30		105	Exam	PCA	DMEFEP
ECOL 43010 Climatology and meteorology in ecology	CME 4311	Climatology and meteorology in ecology	PD EC	Kazakh/ Russian/English	5	15	30		105	Exam	PCA	DMEFEP
			Ch	oose one discipline								
ECOL 43011 Reserve management and studies	RS 4312	Reserve management and studies	PD EC	Kazakh/ Russian/English	6	30	30		120	Exam	PCA	DMEFEP
ECOL 43012 Ecology of Kazakhstan	EK 4313	Ecology of Kazakhstan	PD EC	Kazakh/ Russian/English	6	30	30		120	Exam	PCA	DMEFEP
				Semester 8						•		
INEX 42060 Industrialpractice	IP 4314	Industrialpractice	PD UC		6					Report		
PWIN 42061 Pre – diplomapractice	UP 4315	Pre – diplomapractice	PD UC		6					Report		
MFA420001 Module of final assessment		efending a diploma thesis, diploma paring and passing a comprehensive	FA		12					Defense ofdiplo ma project or passnig a CE		
		Total credits f	or 4 rd year		60	120	930		750			
		Total for educatio	n program		240	765	190 5	105	424 5			

		ied	Amou	ntofsubjec	ts	Total of	credits							А	mount	
Course	Semester	Amountofmodulestobestudied	CC	UC	EC	Theoreticalclasses	Educationalpractice	Industrial practice	Pre – diploma practice	Finalassessment	otal	Total amount in hours	Exam	Differentiated attestation	Coursepaper	Report
	1	6	5	1		30					30	900	5	1		
1	2	7	4	2	1	27	3				30	900	5	1		1
	3	6	1		4	30					30	900	5	1		
2	4	7	1	2	2	27		3			30	900	5	1		1
	5	6		2	4	30					30	900	6			
3	6	6		1	4	27		3			30	900	5			1
	7	7		1	6	36					36	1080	7			
4	8	3						6	6	12	24	720				2
Total	l:	48	11	9	21	207	3	12	6	12	240	7200	38	4		5

4. Consolidation table displaying the amount of obtained credits within the modular education program

5 Organization of Educational Process

1.Specific admission requirements:Citizens of the Republic of Kazakhstan with general secondary, technical and professional, post-secondary, higher education are admitted to bachelor programs based on the results of the UNT. Acceptancer of foreign citizens on a paid basis is carried out according to the results of an interview.

2.Specific arrangements for recognition of prior learning:Conditions for the recognition of prior learning are carried out according to the university's internal regulations. The document that confirms results of non-formal education is a certificate of completion or a diploma of completion.

3. Qualification requirements and regulations: Individuals who have mastered at least 240 academic credits for the entire period of studies, including all types of student's learning activities, and who have successfully completed their final attestation, are awarded a bachelor's degree and are awarded a higher education diploma with an application (transcript). In the case of early mastering of the bachelor's study program and fulfillment of the requirements envisaged for it, the student is awarded a bachelor's degree regardless of the duration of his/her studies.

4. Occupational profile/s of graduates: Bachelor graduates are involved in the development of state programs for the development of economic sectors in the field of organizational, technological, environmental and environmental impact assessments and environmental audits; collects materials and conducts laboratory studies of pollution levels; Participates in the development of environmental passports of enterprises and research in the field of ecology; The provision of advisory services to the public on environmental issues; participate in environmental monitoring.

5. Methods and techniques for program delivery: Innovative technologies and interactive teaching methods will be used in classes within the implementation of the educational program.

6. Assessment criteria of learning outcomes:Learning achievements (knowledge, skills, abilities and competencies) of students are scored according to a 100-point scale corresponding to the international letter grading system (positive grades, as they decrease, from «A» to «D», "unsatisfactory" – «FX», «F») with the corresponding digital equivalent on a 4-point scale (see *Table*).

the traditional grading scale and EC15			
Әріптік жүйе	Баллдардың сандық	Баллдар (%-түрінде)	Дәстүрлі жүйе бойынша
бойынша баға/Оценка	эквиваленті/	Баллы (%-ное	баға/Оценка по традиционной
по буквенной системе/	Цифровой	содержание)	системе/ Assessment by
Evaluation by letter	эквивалент /	Points (in %)	traditional system
grading system	Equivalent in numbers		
А	4,0	95-100	Өте жақсы/Отлично/
A-	3,67	90-94	Excellent
B+	3,33	85-89	Жақсы/Хорошо/ Good
В	3,0	80-84	
B-	2,67	75-79	
C+	2,33	70-74	
С	2,0	65-69	Қанағаттанарлық/ Удовлетворительно/ Satisfactory
C-	1,67	60-64	
D+	1,33	55-59	
D-	1,0	50-54	
FX	0,5	25-49	Қанағаттанарлықсыз/
F	0	0-24	Неудовлетворительно/
			Unsatisfactory

Grade-rating letter system for assessing educational achievements of students with their transfer into the traditional grading scale and ECTS