



«ҚАЗАҚ ҰЛТТЫҚ ҚЫЗДАР ПЕДАГОГИКАЛЫҚ УНИВЕРСИТЕТІ» КеАҚ  
НАО «КАЗАХСКИЙ НАЦИОНАЛЬНЫЙ ЖЕНСКИЙ ПЕДАГОГИЧЕСКИЙ  
УНИВЕРСИТЕТ»  
NJSC «KAZAKH NATIONAL WOMEN'S TEACHER TRAINING  
UNIVERSITY»

**КЕЛІСІЛДІ/ СОГЛАСОВАНО/ AGREED**

Алматы қ. Білім басқармасымен/  
с Управлением образования г. Алматы/  
with the Department of Education of Almaty  
Білім басқармасының басшысы/  
Руководитель Управления образования/  
Head of Education Department

  
Е. Жылқыбаева/  
E. Zhylkybayeva



**БЕКІТІЛДІ/ УТВЕРЖДЕНО/ APPROVED**

Директорлар кеңесінің шешімімен /  
Решением Совета директоров /  
By the decision of the Board of Directors

Хаттама / Протокол / Protocol № 3  
«16» 06 2023 ж./г.








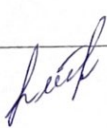
**БІЛІМ БЕРУ БАҒДАРЛАМАСЫ  
ОБРАЗОВАТЕЛЬНАЯ ПРОГРАММА  
EDUCATIONAL PROGRAMME**





**6B01512-ГЕОГРАФИЯ-БИОЛОГИЯ  
6B01512-ГЕОГРАФИЯ-БИОЛОГИЯ  
6B01512- GEOGRAPHY-BIOLOGY**

**БАКАЛАВРИАТ  
BACHELOR'S DEGREE**

Алматы/ Almaty, 2023

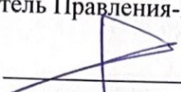
БББ әзірленді/ ОП разработана/ The EP is developed:

1	<p>Жұмыс тобының жетекшісі/ Руководитель рабочей группы/ Head of the working group</p>	  	<p><b>Тулегенов Елдаулет Аскарбекович</b> - PhD, қауым.профессор м.а., География кафедрасының бағдарлама көшбасшысы, 87025709990, <a href="mailto:er-daulet_kz@mail.ru">er-daulet_kz@mail.ru</a></p> <p><b>Тулегенов Елдаулет Аскарбекович</b> - PhD, и.о. ассоц профессора, программный лидер кафедрой Географии, 87025709990, <a href="mailto:er-daulet_kz@mail.ru">er-daulet_kz@mail.ru</a></p> <p><b>Tulegenov Yerdaulet</b> - PhD, acting assoc professor, Leader of Programme Department of Geography, 87025709990, <a href="mailto:er-daulet_kz@mail.ru">er-daulet_kz@mail.ru</a></p> <p><b>Калекешов Аскар Маралович</b> – б.ғ.к., Биология кафедрасының бағдарлама көшбасшысы 87783162050 <a href="mailto:akan.maralov@mail.ru">akan.maralov@mail.ru</a>.</p> <p><b>Калекешов Аскар Маралович</b> – к.б.н, программный лидер кафедры Биологии 87783162050 <a href="mailto:akan.maralov@mail.ru">akan.maralov@mail.ru</a>).</p> <p><b>Kalekeshov Askar</b> - Candidate of Biological Sciences, Leader of Programme Department of biology 87783162050, <a href="mailto:akan.maralov@gmail.com">akan.maralov@gmail.com</a></p>
2	<p>Әзірлеушілер/ Разработчики/ Developers</p>	  	<p><b>Токсабаева Макпал Ербосыновна</b> – география магистрі, география кафедрасының аға оқытушысы, 87078053801, <a href="mailto:makpal25071986@gmail.com">makpal25071986@gmail.com</a>;</p> <p><b>Токсабаева Макпал Ербосыновна</b> – магистр географии, старший преподаватель кафедры географии, 87078053801, <a href="mailto:makpal25071986@gmail.com">makpal25071986@gmail.com</a>;</p> <p><b>Toksabayeva Makpal</b> - master of geography, Senior Lecturer, Department of Geography, 87078053801, <a href="mailto:makpal25071986@gmail.com">makpal25071986@gmail.com</a>;</p> <p><b>Кулбекова Айман Абдижапбаровна</b> –биология магистрі, аға оқытушы, 87071280988, <a href="mailto:kulbekova.aiman@gmail.com">kulbekova.aiman@gmail.com</a> )</p> <p><b>Кулбекова Айман Абдижапбаровна</b> - магистр биологии, старший преподаватель, 87071280988, <a href="mailto:kulbekova.aiman@gmail.com">kulbekova.aiman@gmail.com</a> )</p> <p><b>Kulbekova Aiman</b> - Master of pedagogical sciences in biology, Senior Lecturer of the Department of Biology, 8 707 1280988, <a href="mailto:kulbekova.aiman@gmail.com">kulbekova.aiman@gmail.com</a></p>
3	<p>Студент кеңесшілер/ Студенты-консультанты/ Student consultants</p>	  	<p><b>Машырхан Жібек Бахытқызы</b> - 6B01512-География-Биология БББ, 2 курс студенті, 87476289369, <a href="mailto:mashyrkhan04@gmail.com">mashyrkhan04@gmail.com</a>;</p> <p><b>Машырхан Жібек Бахытқызы</b> - ОП 6B01512-География-Биология, студент 2 курса, 87476289369, <a href="mailto:mashyrkhan04@gmail.com">mashyrkhan04@gmail.com</a>;</p> <p><b>Mashyrkhan Zhibek</b>- 2th year student of the education programme 6B01512- Geography-Biology, 87476289369, <a href="mailto:mashyrkhan04@gmail.com">mashyrkhan04@gmail.com</a></p> <p><b>Копжасарова Гулзира Мұратбекқызы</b> -6B01512-География-Биология БББ, 2 курс студенті, 8777308 4778, <a href="mailto:gulzirakopjasarova2@gmail.com">gulzirakopjasarova2@gmail.com</a>;</p>

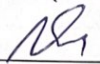
			<p><b>Копжасарова Гулзира Мұратбекқызы</b> - ОП 6B01512-География-Биология, студент 2 курса, 87773084778, <a href="mailto:gulzirakopjasarova2@gmail.com">gulzirakopjasarova2@gmail.com</a>;</p> <p><b>Kopjasarova Gulzira</b> - 2th year student of the education programme 6B01512- Geography-Biology, 87773084778, <a href="mailto:gulzirakopjasarova2@gmail.com">gulzirakopjasarova2@gmail.com</a></p>
4	Сарапшылар/ Эксперты / Experts		<p><b>Биримкулова Баян Аскербековна</b>- ЖШС Алматы қаласы Шоқан Уәлиханов атындағы мектептің география пәнінің мұғалімі, 87012160068, <a href="mailto:bajanalmnis@gmail.com">bajanalmnis@gmail.com</a></p> <p><b>Биримкулова Баян Аскербековна</b> -ТОО учитель географии школы имени Шокана Уалиханова г. Алматы, 87012160068, <a href="mailto:bajanalmnis@gmail.com">bajanalmnis@gmail.com</a></p> <p><b>Birimkulova Bayan</b> – Almaty, teacher of geography Private school named after Shokan Ualikhanov, 87012160068, <a href="mailto:bajanalmnis@gmail.com">bajanalmnis@gmail.com</a></p>
			<p><b>Чимирбаева Сағымкуль Кемаловна</b>- Алматы қаласы № 96 жалпы білім беретін мектебінің биология пәнінің мұғалімі, 87782109343, <a href="mailto:sagymkul1972@mail.ru">sagymkul1972@mail.ru</a></p> <p><b>Чимирбаева Сағымкуль Кемаловна</b>- Учитель биологии общеобразовательной школы № 96 города Алматы, 87782109343, <a href="mailto:sagymkul1972@mail.ru">sagymkul1972@mail.ru</a></p> <p><b>Shimirbaeva Sagumgul</b>- Almaty, - Biology teacher of secondary school No. 96, 87782109343, <a href="mailto:sagymkul1972@mail.ru">sagymkul1972@mail.ru</a></p>
5	Жұмыс берушілер/ Работодатели/ Employers		<p><b>Даулетбак Гаухар Даулетбақызы</b>- Ш.Смаханұлы атындағы №62 гимназия директордың оқу-тәрбие ісі жөніндегі орынбасары, Алматы қ, 87074182458, <a href="mailto:dauletbak83@mail.ru">dauletbak83@mail.ru</a></p> <p><b>Даулетбак Гаухар Даулетбақызы</b>- заместитель директора по учебно-воспитательной работе гимназии №62 им. Ш. Смаханулы, г. Алматы, 87074182458, <a href="mailto:dauletbak83@mail.ru">dauletbak83@mail.ru</a></p> <p><b>Dauletbak Gauhar</b> - Almaty, Deputy Director for educational work of gymnasium No. 62 named after sh. Smakhanuly, 87074182458, <a href="mailto:Dauletbak83@mail.ru">Dauletbak83@mail.ru</a></p>
			<p><b>Қасымова Айжан Тойбекқызы</b> - №59 мектеп-гимназияның директоры, Алматы қ</p> <p><b>Қасымова Айжан Тойбекқызы</b> - директор школы-гимназии № 59, г. Алматы, 87753037570, <a href="mailto:ajzhan.kasymova@bk.ru">ajzhan.kasymova@bk.ru</a></p> <p><b>Kasimova Aizhan</b>- Almaty, No. 59 mектеп-gymnasium directors. 87753037570, <a href="mailto:ajzhan.kasymova@bk.ru">ajzhan.kasymova@bk.ru</a></p>

Білім беру бағдарламасы талқыланды және бекітуге ұсынылды/  
Образовательная программа рассмотрена и рекомендована к утверждению на заседаниях/  
The educational program was considered and recommended for approval at meetings:

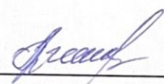
Университеттің Ғылыми Кеңесі/ Ученого Совета Университета/ Academic Council of University  
Хаттама / Протокол / Protocol № 8 «04» 05 2023 ж./г.

Ғылыми Кеңес төрағасы (Басқарма Төрағасы - Ректор) /  
Председатель Ученого совета (Председатель Правления-Ректор) /  
Chairman of the Academic Council  
(The Chair of the Managing Board-Rector)  Г. Қанай / Qanay G.

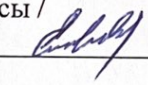
Университеттің оқу-әдістемелік кеңесі/ Учебно-методического совета университета/  
Educational and Methodical Council of the University  
Хаттама/ Протокол/ Protocol № 4 «28» 04 2023 ж./г.

ОӘК төрағасы / Председатель УМС / Chairman of the EMC /  
Академиялық мәселелер жөніндегі проректор (Басқарма мүшесі)/  
Проректор по академическим вопросам (Член Правления)/  
Vice-Rector for Academic Affairs  
(Member of the Managing Board)  Е. Жуманкулова / Zhumankulova E.

Жаратылыстану институтының әдістемелік бюросы/ Методическое бюро института  
естествознания / Methodological Bureau of the Institute of Natural Science  
Хаттама/ Протокол/ Protocol № \_\_\_\_\_ «\_\_\_\_» \_\_\_\_\_ 2023 ж./г.

ИӘБ төрағасы/  
Председатель МБИ/  З.Аргынбаева/  
Chairman of the MBI Z.Arginbaeueva

География кафедрасы/ Кафедра Географии / Departments of Geography  
Хаттама/ Протокол/ Protocol № 7 «30» 03 2023 ж./г.

Бағдарлама көшбасшысы /  
Программный лидер /  Е.Тулегенов/  
Program leader E. Tulegenov



## 1. CHARACTERISTIC OF THE EDUCATIONAL PROGRAM

**The purpose of the educational program:** Training of professional personnel for the education system with fundamental knowledge and innovative methods for the implementation of pedagogical activities in the field of teaching geography and biology.

### 1.1 GENERAL INFORMATION

<b>Type of educational program</b>	current
<b>Name of the educational program</b>	6B01512 – Geography- Biology
<b>Field of education</b>	6B01 Pedagogical sciences
<b>Training direction</b>	6B015 Teacher training of natural science subjects
<b>The group of the educational program</b>	B014 Training Geography teachers
<b>License to engage in educational activities</b>	The Educational program is implemented on the basis of the Appendix to the License № KZ04LAA00018542 dated 04.08.2020 in the direction of training 6B015-Teacher training in science subjects, issued by the Committee for Control in the Sphere of Education and Science of Ministry of Education and Science of the Republic of Kazakhstan.
<b>Number and Date of Registration/ Update in the Register of EP</b>	№ _____, « » « » 2023
<b>UNT Subjects</b>	1 Object. Geography 2 Object. World History
<b>Educational level by NQF</b>	Bachelor's Degree, level 6
<b>Awarded degree</b>	Bachelor of Education in the Educational Program 6B01512 – Geography- Biology
<b>Accreditation</b>	-
<b>Rating of the educational program</b>	-
<b>The total amount of academic credits</b>	240
<b>Study duration</b>	4 years

### 1.2 VISION, MISSION, PROGRAM GOAL, VALUES, UNIVERSITY GRADUATE ATTRIBUTES

**Vision:** An intellectual platform that develops educators who are open to new ideas and able to lead in a rapidly changing world.

**Mission:** Developing teacher leaders, who can create, develop, and disseminate advanced knowledge and values in education for the benefit our country and the world.

**Program goal:** Our University aims to become a hub for innovative teaching, learning, research as well as the development of rural education in Central Asia.

**Values:** Integrity, commitment, care.



### University graduate attributes:

- Self-guided learners and reflexive practitioners
- Responsible personalities with moral and ethical values
- Professionals with deep subject knowledge and digital skills
- Creative and critical thinkers and excellent team players and communicators
- Adaptive leaders in teaching and learning
- Diverse, inclusive and for equality of opportunity in society

### 1.3. THE RATIONALE BEHIND THE EDUCATION PROGRAM:

The educational program 6B01512 – Geography- Biology is aimed at the personal and social development of students, psychological and pedagogical support of the educational process. It also ensures the implementation of professional activities aimed at harmonizing the social spheres of the educational process and education in the spirit of patriotism, friendship of the peoples of the Republic of Kazakhstan, respect for different cultures, traditions and customs.

In the period of the strengthening of the globalization process in the world, modern geography is an independent science combining knowledge about modern geography-the earth in the period of the strengthening of the globalization process in the world; combining knowledge about the earth, provides a combination of natural science, political and social, socio-economic, environmental and technological information.

Educational program 6B01512 – Geography- Biology it is focused on the ability to formulate and accurately solve problems in the field of geography and biology education, apply information technologies in the framework of pedagogical activity, and successfully implement research activities.

The educational program regulates the goals, results, content, conditions and technologies for the implementation of the educational process, as well as an assessment of the quality of graduate training in this area of training, and contains materials that determine the quality of training of students and the implementation of appropriate educational technologies.

**Market demand.** Highly qualified teachers play an important role in improving the quality of secondary education and depends on the professional training of staff. The number of teachers in the country is increasing every year.

**By geography:** There are **285 996** teachers working in State secondary schools, including **9 040** geography teachers. The total number of teachers with a master's degree in public secondary schools is **5029**, of which **236** are geography teachers.

The need for teaching staff in state secondary schools, in total state secondary schools is **5 267** people, of which **133** are geography teachers. (Akmola- 20, Aktobe- 2, Almaty- 9, Atyrau- 2, WKO- 6, Zhambyl- 5, Karaganda- 35, Kostanay-0, Kyzylorda-0, Mangystau- 9, Pavlodar- 5, SKO- 18, Turkestan- 4, East Kazakhstan region-2, Astana-4, Almaty-2, Shymkent-2).

**By Biology:** There are **285 996** teachers working in State secondary schools, including **9 651** biology teachers. The total number of teachers with a master's degree in public secondary schools is **5 029**, including **293** biology teachers.

The need for teaching staff in state secondary schools, in total state secondary schools is **5 267** people, of which **136** are biology teachers. (Akmola- 5, Aktobe- 2, Almaty- 0, Atyrau- 0, WKO- 60, Zhambyl- 2, Karaganda- 9, Kostanay-0, Kyzylorda-11, Mangystau-7, Pavlodar- 1, SKO- 2, Turkestan- 1, East Kazakhstan-1, Astana-2, Almaty-0, Shymkent-0). (Source: NOBD data: JSC "INFORMATION AND ANALYTICAL CENTER", "STATISTICS OF THE EDUCATION SYSTEM OF THE REPUBLIC OF KAZAKHSTAN" National Collection).



#### 1.4. DISTINCTIVE FEATURES OF THE EDUCATIONAL PROGRAM

Academic mobility	Niide University (Turkey, Niide)
-------------------	-------------------------------------

#### Coincidence with similar EP of leading universities in the near and far abroad

**Maynooth University.** In the 1st year, he studies 15 credits in geography, biology, in the 2nd year 20 credits in geography, 20 credits in biology, 25 credits in geography, 25 credits in biology; Conducts research in geography and biology in the 4th year 5 credits.

#### 1.5. GRADUATE CAREER OPPORTUNITIES

- General education organizations (secondary schools, gymnasiums, lyceums, teacher training colleges, organizations of primary and secondary vocational education, departments of education, research and production institutions, universities, educational centers)

#### 1.6. AREAS OF PROFESSIONAL COMPETENCE

##### Area of professional competence 1

Activity studies and masters the advanced pedagogical and geographical experience in the field of education on geography. Independently develops the most advanced experimental, ICT tools, technologies and ways of teaching geography. Experimental geographic practice at the proper professional level. Assesses the role of geographical science in social and economic development. Assesses the student's self-education, practical skills and knowledge of geography. Has the knowledge, skills and abilities necessary for the implementation of all professional activities. Summarizes the content of the discipline in professional orientation with the use of obtained knowledge To be able to organize the study and teaching of geography, as well as to assess their abilities and interests, deeply mastering the subject area, coordinate it with the needs of society, to use the results of modern research in professional activities.

##### Area of professional competence 2

Is able to apply geographical knowledge in various situations of daily life, methods of geography teaching and ways of practice. Apply the knowledge of General and theoretical geography for understanding and analysis of natural and man-made phenomena and processes. Combines actual problems of geography and global actual problems. Work with the map on geography, development of research projects, analysis of results and summarizing. Applies knowledge and skills in practice. Proves his point of view on the basis of appeal to ideas. Deliberately exploring different approaches to form your own conclusions. Manages ICT tools with precision in accordance with its professional activities. Understands and demonstrates respect for the use of ICT tools. Committed to professional and personal growth. The graduate of the program will acquire professional skills in applied biology. Possess biological knowledge sufficient to prepare a student for the international Olympiad and ready for scientific activity.

##### Area of professional competence 3

Effectively organize and use your time. Aware of the responsibility in its activities, complies with safety regulations, is active in the protection of the environment. The team clearly communicate their thoughts, offering new solutions in accordance with the result. Able to work in a group, able to combine his opinion with the opinion of the team, expresses high confidence in maintaining their



views and ideals in conflict resolution. Explains social and ethical values based on social norms. With the accuracy of use in professional activities.

### **1.7. EDUCATIONAL PROGRAM LEARNING OUTCOMES:**

**LO 1** - Applies a variety of communication formats taking into account socio-cultural diversity, adheres to the principles of equality and accessibility in education, to create a prosperous and inclusive environment, has leadership qualities and is able to apply them to develop collective potential.

**LO 2** - Possess high-level critical and creative thinking skills, are capable of self-regulation and reflection to solve professional problems.

**LO 3** - Demonstrate knowledge of and adherence to ethical and legal norms in research and use of digital technologies. Apply security measures when working with digital information and data protection, promote the active, safe and ethical use of digital resources.

**LO 4** - Discusses the history, theoretical foundations, main problems, prospects of geographical science, knows the patterns characteristic of the globe, the causes of natural phenomena and trends, predicts, determines, compares, understands the physical and geographical position, interrelations of the components of nature, characterizes, distinguishes natural territorial complexes and features of their location, determines geographical objects and recreational places.

**LO 5** - Characterizes the economic and geographical position, compares, evaluates socio-economic development and the quality of recreational activities, knows the categories of geo-economics, methods of effective use of natural resources, classifies, determines the role of countries and regions in geographical space, discusses, evaluates the geo-economic situation.

**LO 6** - Knows the essence, the main types of political geography, methods of environmental protection, discusses external and internal geopolitics, administrative-territorial division and regional policy, political ideas. Compares urban agglomerations, discusses strategic directions of urban development, environmental problems, analyzes, predicts sustainability.

**LO 7** - Creates, analyzes geographical maps and plans, conducts cartographic and geodetic measurement and field research. Defines geographical concepts and terms, the meaning of geographical names, knows, classifies, applies geography teaching tools, topographic tools, geodetic instruments, geoinformation technologies, methods of geographical research.

**LO 8** - Apply the principles of distribution, systematization, evolution and phylogenetic relationships of plants, animals and microorganisms in the environment in the learning process;

**LO 9** - Proficient in the methods of molecular biology, biotechnology and microbiological research, applies in scientific projects;

**LO 10** - Analyzes the basic structure of the human body, historical development, age characteristics and its interaction with the environment;

**LO 11** - Possesses knowledge in the field of modern biological science, studies, generalizes, applies and disseminates the experience of highly professional teachers;

**LO 12** - Is able to apply innovative methods of teaching geography and biology and methods of practical activity, a system of criteria assessment. Has pedagogical and geographical, biological experience, uses the results of research in professional activities.





### Matrix for correlating EP learning outcomes with graduate attributes

	LO 1	LO 2	LO 3	LO 4	LO 5	LO 6	LO 7	LO 8	LO 9	LO 10	LO 11	LO 12
<b>GA1</b>	+	+	+		+				+		+	+
<b>GA 2</b>	+			+			+		+		+	+
<b>GA 3</b>	+	+				+	+	+	+		+	+
<b>GA 4</b>				+			+	+	+		+	+
<b>GA 5</b>	+	+	+			+			+		+	+
<b>GA 6</b>	+	+	+				+	+			+	+

## 1.8. REFERENCES

**The educational program is developed based on the following legal acts:**

- 1) The State mandatory standard of Higher and Postgraduate Education, approved by the Order of the Minister of Science and Higher Education of the Republic of Kazakhstan dated July 20, 2022 No. 2. Registered with the Ministry of Justice of the Republic of Kazakhstan on July 27, 2022 No. 28916.
- 2) The Professional standard "Teacher" approved by the order of the Acting Minister of Education of the Republic of Kazakhstan dated December 15, 2022 No. 500. Registered with the Ministry of Justice of the Republic of Kazakhstan on December 19, 2022 No. 31149.
- 3) Methodological recommendations on the organization and conduct of pedagogical practice for students of the field of education "pedagogical sciences. Order No. 125 of 27.03.2023

## 2. CONTENT OF THE EDUCATIONAL PROGRAM

№	Code and name of modules	Total credits by module	№	Name of subject and code	Credits by subjects	Cycle/component
1	<b>GES -1 General educational subjects module</b>	<b>36</b>	1	<b>GES 101</b> History of Kazakhstan	5	GC/ CC
			2	<b>GES 102</b> Philosophy	5	GC/ CC
			3	<b>GES 103</b> Social and Political Knowledge Module (Sociology, Cultural Studies, Political Science, Psychology)	8	GC/ CC
			4	<b>GES 1(2)04</b> Physical Culture	8	GC/ CC
			5	<b>GES 205</b> Information and Communication Technologies	5	GC/ CC



			6	<b>GES 106/1</b> Fundamentals of Legal Literacy and Anti-Corruption culture <b>GES 106/2</b> Fundamentals of Ecology and Safe life <b>GES 106/3</b> Fundamentals of Economics and Entrepreneurship <b>GES 106/4</b> Fundamentals of Leadership and receptivity to innovation <b>GES 106/5</b> Emotional Intellect <b>GES 106/6</b> Fundamentals of mathematical statistics	5	GC/ OC
2	<b>GLC -2</b> <b>Language communication module</b>	25	1	<b>GLC 101</b> Kazakh (Russian) Language	10	GC/ CC
			2	<b>GLC 102</b> Foreign Language	10	GC/ CC
			3	<b>GLC 203</b> English for Academic Purposes	5	CC/ UC
3	<b>GER – 3</b> <b>Global Ethics and Research module</b>	22	1	<b>GER 201</b> Inclusive Education	6	CC/ UC
			2	<b>GER 402/1</b> Fundamentals of Educational research	6	CC/ UC
			4			
3	<b>GER 303</b> Professional ethics and identity	6	MC/ UC			
4	<b>GPS – 4</b> <b>General pedagogical subjects module</b>	21	1	<b>GPS 201</b> Educational psychology	6	CC/ UC
			2	<b>GPS 202</b> Pedagogy and didactic	6	CC/ UC
			3	<b>GPS 303</b> Criteria Assessment Technology	5	CC/ UC
			6	<b>CT(IP) 104</b> Continuous training (introductory) practice	2	CC/ UC
			7	<b>C(PP)P 205</b> Continuous (psychology and pedagogical) practice	2	CC/ UC
5	<b>FGS – 5</b> <b>Physical geography subjects module</b>	38	1	<b>FGS 101</b> Naturalscience and Earthscience	6	CC/ UC
			2	<b>FGS 202/1</b> Kartography <b>FGS 202/2</b> Sacred geography of Kazakhstan	5	CC/ OC
			3	<b>FGS 203/1</b> Geology and geomorphology <b>FGS 203/2</b> Topography with base of the geodesies	5	CC/ OC
			4	<b>FGS 204/1</b> Gydrology, climatology and meteorology <b>FGS 204/2</b> Geocology and nature protection	5	CC/ OC
			5	<b>FGS 305</b> Physical geographical regions of the world	5	CC/ UC
			6	<b>FGS 306</b> Physical geographical regions of Kazakhstan	5	MC/ UC
			7	<b>FGS 407/1</b> Geoinformatics <b>FGS 407/2</b> Toponymy	5	MC / OC
			8	<b>FGS 108</b> Training - field practice	1	CC/ UC
			9	<b>FGS 209</b> Training - field practice	1	CC/ UC



6	EGS – 6 Economic geography subjects module	16	1	EGS 301 Economic geography of the world	6	CC/ UC
			2	EGS 302/1 Economic geography of Kazakhstan	5	MC/ OC
				EGS 302/2 Practical geography		
			3	EGS 403/1 Geographical research methods	5	CC/ OC
EGS 403/2 Recreational geography						
7	BPA-7 Biodiversity of plants and animals	27	1	BPA 101 Botany	5	CC/ UC
			2	BPA 202/1 Zoology	6	CC/ OC
				BPA 202/2 Entomology		
			3	BPA 203/1 Ecophysiology	5	CC/ OC
				BPA 203/2 Environmental studies		
			4	BPA 304/1 Cytology, histology and embryology	6	MC/ OC
BPA 304/2 Cellular pathology						
5	BPA 405/1 Evolutionary studies	5	MC/ OC			
	BPA 405/2 Anthropology					
8	SHD-8 Structure, heredity and development of living organisms	15	1	SHD 301/1 Human anatomy	6	CC/ OC
				SHD 301/2 Biology of ontogenesis		
			2	SHD 402/1 Fundamentals of genetics and molecular Biology	4	CC/ OC
				SHD 402/2 Plant selection and animal breeding		
3	SHD 403/1 Biochemistry	5	CC/ OC			
	SHD 403/2 Fundamentals of Enzymology					
9	TMP – 9 Teaching methods and pedagogical foundations of professional activity	34	1	TMP 301 Methodology of teaching geography	5	MC/ UC
			2	TMP 302 Methodology of teaching biology	5	MC/ UC
			3	PP 303 Pedagogical Practice	6	CC/ UC
			4	P(P)P 404 Production (pedagogical) practice	16	MC/ UC
			5	P(P)P 405 Pre -diploma (pedagogical) practice	2	MC/ UC
10		8	1	WDDP(P)PCE 401 Writing and defending a diploma paper (project) or passing a comprehensive exam	8	FA
<b>TOTAL:</b>		<b>240</b>			<b>240</b>	



NJSC «KAZAKH NATIONAL WOMEN TEACHER TRAINING UNIVERSITY»  
Institute of Natural Sciences



## 2.1. DESCRIPTION MODULES AND DISCIPLINES

<b>GES-1 GENERAL EDUCATION SUBJECTS MODULE</b>							
<i>Description of the module:</i> The module is represented by a set of compulsory disciplines that contribute to the development of information literacy in all spheres of one's life and activity. The disciplines of the module are aimed at the formation of the ideological, civil and moral positions of the future specialist, competitive on the basis of knowledge of information and communication technologies, orientation towards a healthy lifestyle, self-improvement and professional success. Students get a general understanding of the development of philosophy and the influence of the methodology of reflection on the development of science, interprets the content and specific features of the mythological, religious and scientific worldview, analyze the main stages of the historical development of Kazakhstan.							
<b>№</b>	<b>Name of subject and code</b>	<b>Cycle/component</b>	<b>Credits</b>	<b>Subject discription</b>	<b>Teaching methods</b>	<b>LO by EP</b>	<b>Assessment methods</b>
1	<b>GES 101</b> History of Kazakhstan	GC/ CC	5	The purpose of the discipline is to provide objective knowledge about the main stages of the development of the history of Kazakhstan from ancient times to the present. As a result of training, students will be able to: demonstrate knowledge and understanding of the main stages in the development of the history of Kazakhstan; to correlate the phenomena and events of the historical past with the general paradigm of the world-historical development of human society through critical analysis; possess the skills of analytical and axiological analysis in the study of historical processes and phenomena of modern Kazakhstan; be able to objectively and comprehensively comprehend the immanent features of the modern Kazakhstani model of development; systematize and give a critical assessment of historical phenomena and processes of the history of Kazakhstan.	Case study method; brainstorming; Fishbone methods; guest lectures; teamwork; the mental map method	LO 2	essay, presentation, oral exam
2	<b>GES 102</b> Philosophy	GC/ CC	5	The aim of the subject is to form a holistic view of philosophy as a special form of knowledge of the world, its main sections, problems and methods of their study in the context of future professional activity. describe the main content of ontology and metaphysics	Role-playing games; business games; project development; trainings; brainstorming	LO 2; LO 3	Test; Essay discussion



NJSC «KAZAKH NATIONAL WOMEN TEACHER TRAINING UNIVERSITY»  
Institute of Natural Sciences

				in the context of the historical development of philosophy;			
3	<b>GES 103</b> Social and Political Knowledge Module (Sociology, Cultural Studies, Political Science, Psychology)	GC/ CC	8	The aim of the program is to form the social and humanitarian worldview of students in the context of solving the problems of modernizing public consciousness. Students will learn about the relationship between these disciplines and their influence on the formation of individuality, social relations, cultural values and the political system. The discipline develops analytical thinking, the ability to think critically and understand complex social phenomena, and also contributes to the formation of tolerance and civic activity of students.	Cases; Presentation; questions and answers; group exercises; Interactive methods	LO 1; LO 2; LO 3	Test; case analysis; presentation defense, discussion of the article; Reports
4	<b>GES 1(2)04</b> Physical Culture	GC/ CC	8	The purpose of the program is to develop the physical qualities of students' motor culture by using of health-saving technologies. Students will be able to develop the skills of physical, psychophysical and personal qualities, self-diagnosis, teamwork through various sports, improving motivation for a healthy lifestyle and preparing for professional activities	demonstrative method; practical approach method; training	LO 1; LO 2	control tests, differentiated credit
5	<b>GES 205</b> Information and Communication Technologies	GC/ CC	5	The aim of the program is to develop the ability to critically evaluate and analyze the processes, methods of searching, storing and processing information, methods of collecting and transmitting information through digital technologies. Students master the skills of searching and evaluating information resources, ensure data security and communicate effectively using technology. They apply their knowledge to solve problems, demonstrate critical thinking and independence in the use of information and communication technologies.	Problem-based learning method; discussion; project method; case study	LO 1; LO 2; LO 3	Test, Project
6	<b>GES 106</b> Fundamentals of Legal Literacy and	GC/ OC	5	The course is aimed at the formation of a legally competent, law-abiding person. Students will be aware of their rights and responsibilities, show zero tolerance	Case study method; brainstorming;	LO 1; LO 3	Essays; presentations; written exam



NJSC «KAZAKH NATIONAL WOMEN TEACHER TRAINING UNIVERSITY»  
Institute of Natural Sciences

	Anti-Corruption culture			for corruption. Students will be able to apply the social, legal and ethical norms of Kazakhstani society in their activities. The course develops an understanding of the rule of law, ethical principles and principles of combating corruption in society.	Fishbone methods; guest lectures		
	<b>GES 106</b> Fundamentals of Ecology and Safe life			The discipline forms students' modern environmental education and culture, develops skills in applying methods to improve the safety of technical means and technological processes for safe life. Reveals the basic laws of the functioning of ecosystems of various levels of organization, the biosphere as a whole, the contradictions that arise in the relationship between man and nature, as well as the need for respect for nature and ecology.	Case, fishbone, Table T, "JIK SO" method, "Venn Diagram" method, "Cluster" method	LO 1; LO 2; LO 4	Oral interview. Essay. Exam (written, test)
	<b>GES 106</b> Fundamentals of Economics and Entrepreneurship			The discipline is focused on the formation of students' skills of entrepreneurship and business thinking. Through a comprehensive view of the laws of the functioning of the economy, the conditions for doing business, its internal and external environment, students will have the skills to develop a business plan, create and successfully run their own business.	Case study method; brainstorming; Fishbone methods; guest lectures; project method	LO 1; LO 2; LO 3	Essays, presentations, projects, test
	<b>GES 106</b> Fundamentals of Leadership and receptivity to innovation			The course contributes to the disclosure and development of leadership qualities in the personality of each student, the development of innovative susceptibility skills in him, as a process of adaptation to innovations caused by innovative processes, as well as the use of the results of scientific and technical processes in his life and professional activities. Studies the current state and prospects for the development of leadership qualities and the human factor in management.	Inverted learning, situational learning (case collection), technological learning (padlet board, canvas application, comics, kakhot, etc.)	LO 1; LO 2;	Orally (solving cases)
	<b>GES 106</b> Emotional intelligence			The discipline is aimed at mastering the role of a tutor by a teacher in the context of strategic guidelines and priority directions of the state educational policy of	role-playing games; educational discussions; case	LO 1; LO 2;	Criteria-based assessment



NJSC «KAZAKH NATIONAL WOMEN TEACHER TRAINING UNIVERSITY»  
Institute of Natural Sciences

				Kazakhstan. Students determine the place of emotional intelligence and "flexible competencies" in the educational process of a modern school. They apply modern methods and technologies of organizing educational activities, taking into account the development of flexible skills, including in the digital environment. They possess technologies for assessing and developing the emotional intelligence of students of different age groups.	study; project method		method; Project protection
	<b>GES 106</b> Fundamentals of mathematical statistics			The purpose of the discipline is to familiarize students with the forms and laws of consistent thinking, to teach students to think consistently, to contribute to the development of skills of sound argumentation; Students understand the process of collecting, processing data and transmitting ideas, develop skills in using quantitative and qualitative data analysis in assessing the state of the object or phenomenon in question.	Explanation; Case study; Group and pair work.	LO 1; LO 2; LO 3	A written exam.

**GLC-2 Language Communication**

*Module description:* As part of the module, students develop the ability to interpersonal, social and professional communication in Kazakh, Russian and foreign languages. Students develop practical skills in oral communication in a non-native language, writing and academic writing.

№	Name of subject and code	Cycle/component	Credits	Subject discription	Teaching methods	LO by EP	Assessment methods
1	<b>GLC 101</b> Kazakh (Russian) Language	GC/ CC	10	The discipline is aimed at continuing the development of language training in the Kazakh (Russian) language. The purpose of the discipline is a confident command of the language, the ability to use it for professional and educational purposes. Students develop the skills of competent and effective communication in the language, expand their vocabulary, improve grammar and spelling literacy, academic writing skills.	ICT technologies; technology of problem-search learning; test technologies	LO 1; LO 2	Test





NJSC «KAZAKH NATIONAL WOMEN TEACHER TRAINING UNIVERSITY»  
Institute of Natural Sciences

2	<b>GLC 102</b> Foreign Language	GC/ CC	10	The purpose of the discipline is to expand and consolidate students' communication skills in a foreign language for various purposes. During the study of the discipline, students train and improve the skills of listening to foreign speech, speaking, writing and grammar, enriching personal and professional potential. In the process of studying the discipline, students expand their cultural horizons, develop cross-cultural communication skills.	Communicative; ICT technologies	LO 1; LO 2	Test
3	<b>GLC 203</b> English for Academic Purposes	CC/ UC	5	The subject forms knowledge about the genre varieties of the scientific style, mastering modern methods of collecting, storing and processing information and materials in the field of professional activity, as well as the development of skills and abilities of academic communication in four types of speech activity: reading, speaking, writing, listening	RWCT strategies, Content analysis technologies	LO 1; LO 2; LO 3	Essay

**GER – 3 Global Ethics and Research**

*Module description:* The disciplines of the module are aimed at the formation of global competencies applicable in professional activities. Students accept as a value of building a global, inclusive society and contribute to building and supporting it. Students are introduced to scientific research in the professional field, basic methods of data collection and analysis, professional ethics of behavior and research in the professional field. Students identify and associate themselves with a representative of the professional field and plan their professional development, motivated to learn throughout life to build competencies and increase value in the labor market.

№	Name of subject and code	Cycle/component	Credits	Subject description	Teaching methods	LO by EP	Assessment methods
1	<b>GER 201</b> Inclusive Education	CC/ UC	6	The discipline is aimed at the formation and development by students of an understanding of the principles of an inclusive society, where each of its members feels their value and significance. Students are well aware of age-related physiology, anatomy, understand the principles of cognitive skills based on in-depth knowledge of age-related physiology, know how to work with children with OOP, know strategies for	Problem-Based Learning, Flipped Learning, reflexive learning, interactive learning, problem lecture, business game, solving pedagogical	LO 1; LO 2	Oral written and exam, individual and group presentation, individual and group project, quiz



NJSC «KAZAKH NATIONAL WOMEN TEACHER TRAINING UNIVERSITY»  
Institute of Natural Sciences

				creating an inclusive educational environment and know how to build it.	situations, group and individual project, presentation, abstract		
2	<b>GER 402/1</b> Fundamentals of Educational research	CC/ UC	10	The discipline is aimed at developing research skills in the field of pedagogical research. Students know the basic qualitative and quantitative research methods, analyze scientific literature, and use the methodology of Action research, lesson study, observation and reflection. Students can process data and draw up research results for presentation to the public orally and in writing.	Project-based learning	LO2; LO 12	Defending a small-scale research
3	<b>GER 303</b> Professional ethics and identity	MC/ UC	6	The purpose of the discipline is to acquaint students with the attitudes, values, knowledge, beliefs and skills adopted in the professional pedagogical environment. Students develop leadership and proactivity skills in the context of pedagogical activity or outside it, develop a commitment to the national and cultural values of Kazakhstan, get acquainted with and accept as a value the strict observance of professional ethics. Students plan their career path, develop introspection and self-management skills.	Method of discussion; Feedback method; Seminar method; Case study.	LO 2; LO 3; LO 12	Written exam

**GPS – 4 General pedagogical disciplines**

*Description of the module:* The module is compulsory for pedagogical specialties and represents the basics of the discipline, in which the theoretical foundations of the teaching profession are studied. Students get acquainted with the general sections of pedagogy, psychology in the module is presented with flexible content, which is profiled for use in a pedagogical context and is a response to the needs of the modern school.

№	Name of subject and code	Cycle/component	Credits	Subject description	Teaching methods	LO by EP	Assessment methods
1	<b>GPS 201</b> Educational psychology	CC/ UC	6	The purpose of the discipline is to form knowledge in the field of psychology of training and education at different age stages. Students will form a clear	Demonstration method; Method of discussion; Feedback	LO 1; LO 2	Oral questioning, written exam



NJSC «KAZAKH NATIONAL WOMEN TEACHER TRAINING UNIVERSITY»  
Institute of Natural Sciences

				<p>understanding of the psychological ways of motivating students to succeed in school and the assessment of the quality of cognitive processes.</p> <p>Students will form communicative competencies in the teacher-student-parent system, through the assimilation of constructive communication models. By the end of the course, they will acquire the skills of critical assessment of psychological and pedagogical approaches in education.</p>	<p>method; Seminar method; Case study.</p>		
2	<b>GPS 202</b> Pedagogy and didactic	CC/ UC	6	<p>The purpose of the discipline is to form general ideas about pedagogy as a science and the concept of research-based teaching. Students study the historical prerequisites for the development of pedagogical science, understand the basic laws and principles of didactics. Students search for and analyze relevant scientific information using digital tools, are able to argue a point of view based on the fundamental foundations of pedagogy and didactics.</p>	<p>Problem-based learning, SWOT analysis, situational learning, RWCT strategies</p>	<p>LO 1; LO 2; LO 12</p>	Test
3	<b>GPS 303</b> Criteria Assessment Technology	CC/ UC	5	<p>The discipline teaches the practical application of technology in the educational process. Course is forms the skills of developing formative and summative tasks and criteria for assessing the achieved learning outcomes, based on the taxonomy of educational goals and in accordance with the level of education of the student; - teaches the relationship between the purpose, requirements, methods and learning outcomes; - reveals the concept of a rating control system.</p>	<p>Problem-based learning, Flipped Learning, reflexive learning,</p>	<p>LO 2; LO 12</p>	Written exam
4	<b>CT(IP 104</b> Continuous training (introductory) practice	CC/ UC	1	<p>The purpose of the practice is to familiarize students with the basics of pedagogical and research activities for studying the system of planning the work of an educational institution, as well as monitoring the performance of tasks, planned activities; studying the work in the main areas of activity of the educational institution.</p>	<p>Practical (experimental) method, control method (case method, situational analysis method)</p>	<p>LO 2; LO 4; LO 5; LO 6</p>	Report



NJSC «KAZAKH NATIONAL WOMEN TEACHER TRAINING UNIVERSITY»  
Institute of Natural Sciences

5	<b>C(PP)P 205</b> Continuous (psychology and pedagogical) practice	CC/ UC	1	The purpose of the practice is the formation and integration of the main psychological and pedagogical components of the teacher's professional activity in the activities of students. Development of skills of analysis of psychological components of the lesson and their construction in their pedagogical activity. Preparation of the student for the analysis of professional activity and activation of the process of professional and personal self-development.	Practical (experimental) method, control method (case method, situational analysis method)	LO 2; LO 4; LO 5; LO 6	Report
---	---	--------	---	---	---	---------------------------------	--------

**FGS – 5 Physical geography subjects module**

*Module description:* The module is represented by a set of disciplines studying the geographical envelope of the Earth (lithosphere, hydrosphere, atmosphere, biosphere). The disciplines of the module are aimed at explaining the general laws inherent in the globe and their causes, natural phenomena and processes, the interrelations existing between the components of nature. Students determine the features of the earth's nature, the relationship of the components of nature (relief, climate, surface water, soil, flora and fauna) with each other, the influence on each other, the distribution of the territory. Connects the relationship between the environment and man. Solves the problems of environmental protection.

№	Name of subject and code	Cycle/component	Credits	Subject description	Teaching methods	LO by EP	Assessment methods
1	<b>FGS 101</b> Naturalscience and Earthscience	CC/ UC	6	Discipline-forms knowledge about the Earth's atmosphere, hydrosphere, biosphere, shells of the lithosphere, the origin of the Earth and its development, the origin of life on Earth and its evolution, systematic interrelations of nature and society. Students show the layers of the Earth and their characteristic features. Discusses scientific opinions of scientists about the origin of man on earth and his evolution. Determines the causes of natural phenomena and trends.	Group work; Demonstration method; Explanatory method; Illustrative method	LO4, LO7	Oral examination
2	<b>FGS 202/1</b> Kartography	CC/ OC	5	Discipline-forms knowledge about geographical maps, types of cartographic images, carrying out measurement work on the map. Students know the theoretical foundations of cartography, the content of maps, mathematical and geodetic basics, elements. Classifies card types and types. Defines the scale, coordinate	Group work; Demonstration method; Explanatory method; Illustrative method	LO4, LO7	Written exam



NJSC «KAZAKH NATIONAL WOMEN TEACHER TRAINING UNIVERSITY»  
Institute of Natural Sciences

				system, symbol on the map. He gets acquainted with the types of search and cartographic projects on maps, technologies for creating geographical maps. Understands the principles of mapping, creating a cartographic image and its transformation. Knows how to use geographical maps correctly			
	<b>FGS 202/2</b> Sacred geography of Kazakhstan			The discipline studies the history of the origin of unique paleocultural, historical and natural sacred sites of regional and local significance in Kazakhstan, spatial distribution, features of archaeological and architectural monuments, religious and places of worship. Educates respect for sacred places and cultural and historical monuments. Students collect information about nature, the organic world, population, economy, environmental problems, the main stages of history, monuments of culture, literature, art, architecture of sacred places of Kazakhstan.	Group work; Demonstration method; Explanatory method; Illustrative method	LO4, LO7	Written exam
<b>3</b>	<b>FGS 203/1</b> Geology and geomorphology	CC/ OC	5	Discipline-examines knowledge about the origin and development of the Earth, geological processes, relief, its types and forms, origin, distribution. Students describe the forms of relief, external and internal processes. Knows about the origin of minerals and how to use them effectively. Determines the absolute and relative age of rocks. Compares rocks and minerals. Analyzes geological and geomorphological maps. Prepares the geological section.	Group work; Demonstration method; Explanatory method; Illustrative method	LO4, LO5, LO7	Written exam
	<b>FGS 203/2</b> Topography with base of the geodesies			Discipline provides types of cartographic images and topographic surveys, measuring work on the map. Students know the contents of a topographic map, will get acquainted with modern technologies for creating geographical maps. Students determine the position of points on the Earth's surface, geographical and rectangular coordinates, directional angles, azimuths, point height, orientation on the terrain. Knows, uses	Group work; Demonstration method; Explanatory method; Illustrative method	LO4, LO5, LO7	Written exam



NJSC «KAZAKH NATIONAL WOMEN TEACHER TRAINING UNIVERSITY»  
Institute of Natural Sciences

				geodetic instruments (theodolites, levelers, electronic total stations). Creates topographic maps and plans. Conducts local geodetic measurements.			
4	<b>FGS 204/1</b> Hydrology, climatology and meteorology	CC/ OC	5	Discipline-considers the layer of the hydrosphere taking into account its elements, types of climate, climate-forming factors, factors affecting climate change, weather and phenomena occurring in it. Students describe the processes occurring in natural waters, the hydrological state of water bodies, the composition, properties of the atmosphere (heat exchange, thermal regime). Discusses climate change, rational use of water resources. Knows the ways of efficient use of water resources, classifies climate types, compares climate changes, predicts the weather.	Group work; Demonstration method; Explanatory method; Illustrative method	LO4, LO5, LO7	Written exam
	<b>FGS 204/2</b> Geoecology and nature protection			Discipline-forms knowledge on the issues of rational nature management, organization, management of natural resources at the regional level and socio-ecological and economic assessment, improvement of the state of natural resources and the environment. Students know how to optimize the environment, protect the animal and plant world. The state of the environment and human health are interrelated. Predicts the ecological state and sustainability of the environment. Protects the environment from pollution, calculates the costs incurred and payments for environmental pollution.	Group work; Demonstration method; Explanatory method; Illustrative method	LO4, LO6, LO7	Written exam
5	<b>FGS 305</b> Physical geographical regions of the world	CC/ UC	5	Discipline-forms knowledge about continents and oceans. Physical and geographical features of continents, ecology of oceans and ways of effective use of their natural resources are shown. Students know the origin of continents, the history of discovery, the stages of study, the features of ocean waters. Students compare	Group work; Demonstration method; Explanatory method; Illustrative method	LO4, LO5	Oral examination



NJSC «KAZAKH NATIONAL WOMEN TEACHER TRAINING UNIVERSITY»  
Institute of Natural Sciences

				the relief, climate, inland waters, soil, vegetation and fauna of the continents. Defines the similarity and difference of continents.			
6	<b>FGS 306</b> Physical geographical regions of Kazakhstan	MC/ UC	5	Discipline-forms knowledge about the formation and development of the territory of Kazakhstan, geological stages. Students know the history of studying the nature of the territory of Kazakhstan. Characterizes the geographical position of Kazakhstan, natural conditions, types of minerals, knows the features of natural and territorial complexes. Studies the climate, internal waters, soils, animals, plants, minerals of Kazakhstan. Overview of physical zones and specially protected areas. Discusses issues of rational use of mineral resources, environmental ecology.	Group work; Demonstration method; Explanatory method; Illustrative method	LO4, LO6, LO7	Oral examination
7	<b>FGS 407/1</b> Geoinformatics	CC/ OC	5	The discipline forms an idea of the structure, classification, functionality of geographical information systems, the development of a database of geographical information and systems. Students get acquainted with functional programs used for input, storage, processing, analysis, visualization of geographical information. Learn to use software, work in computer networks. Students form groups of geographical data, form and process types of cartographic works using geoinformation technologies.	Group work; Demonstration method; Explanatory method; Illustrative method	LO3, LO7, LO12	Written exam
	<b>FGS 407/2</b> Toponymy			The discipline examines the concepts of toponymy, the theoretical foundations of toponymy, toponyms, the main groups of geographical names, factors influencing the formation of toponomic systems. The discipline studies geographical names, their origin, semantic meaning, essence, subdivisions of toponymy, toponyms and etymology, principles of word formation in toponymy, the law of series in cartographic toponymy, local development, current state, main groups, spelling	Group work; Demonstration method; Explanatory method; Illustrative method	LO4, LO7	Written exam



NJSC «KAZAKH NATIONAL WOMEN TEACHER TRAINING UNIVERSITY»  
Institute of Natural Sciences

				and pronunciation. Students combine toponyms into groups, determine the meaning of geographical names.			
<b>8</b>	<b>FGS 108</b> Training - field practice	CC/ UC	1	<p>The purpose of the practice is the formation of practical skills in working with geodetic instruments and equipment-theodolite, leveling, electronic tachometers, laser rangefinders, eye-measuring, geometric leveling, terrain orientation, the use of field research methods. Students use the map to determine the scale of the terrain, coordinates, azimuths, position, height of points on the Earth's surface, use a symbol. Collects stones and minerals. Analyzes geological, geomorphological, topographic maps, makes plans, prepares geological sections.</p> <p>During field practice, students learn to identify plants in field and laboratory conditions, conduct biomorphological descriptions of plants (anatomical and morphological analysis), conduct phenological observations in nature. Creates herbarium samples from plant species and gets acquainted with international names of species. Defines the plant communities of the environment. Gets acquainted with the types of medicinal, raw materials, production, feed value. As a result of practice, students develop their own research skills.</p>	The method of empirical research (observation, comparison, measurement, experiment)	LO4, LO7, LO12	Report
<b>9</b>	<b>FGS 209</b> Training - field practice	CC/ UC	1	<p>The purpose of the practice is for students to determine the relationship between the individual components of nature and economic activity. Students observe, predict, compare the processes occurring in natural waters, the hydrological state of water bodies, weather changes. Creates a soil profile. Studies the natural area, describes production complexes. Offers ways to make the most of nature.</p> <p>During field practice, students learn to identify animals in field and laboratory conditions, to carry out their</p>	The method of empirical research (observation, comparison, measurement, experiment)	LO4, LO7, LO12	Report





NJSC «KAZAKH NATIONAL WOMEN TEACHER TRAINING UNIVERSITY»  
Institute of Natural Sciences

				biomorphological characteristics (morphological analysis), to carry out phenological observations in nature. Possess methods of biological control and laboratory processing of zoological materials; get acquainted with economically significant groups of animals (pests, parasites, entomophages and others). As a result of practice, students develop their own research skills.			
--	--	--	--	--	--	--	--

**EGS – 6 Economic geography subjects module**

*Module description:* The module is represented by a set of disciplines that characterize the social, economic, and political situation of the countries of the world and Kazakhstan. The module's disciplines allow teaching the administrative-territorial division of the world and Kazakhstan, the structure of the economy, economic relations, territorial organization of production, development and placement of production forces. Students classify natural resources, describe the location and distribution of peoples, labor resources. Divides the branches of the economy (producer and processor), determines the features of the placement. Compares the economic development of the countries of the world and Kazakhstan. Students understand the essence of geographical research methods, classify geographical methods, use geographical methods in conducting geographical research. He gets acquainted with functional programs for input, storage, processing, analysis, visualization of geographical information, learns to work using software tools, performs cartographic work.

№	Name of subject and code	Cycle/component	Credits	Subject description	Teaching methods	LO by EP	Assessment methods
1	<b>EGS 301</b> Economic geography of the world	CC/ UC	6	Discipline-characterizes the economic and social situation of states around the world. Examines the economic, social, political, environmental problems of countries, geo-economic relations between states. Students discuss the stages of formation, quantitative and qualitative changes in the political map of the world, group the countries of the world, identify the branches of the world economy (mining and processing), classify the natural resources, population, labor resources of the world, compare the socio-economic development of the countries of the world.	Group work; Demonstration method; Explanatory method; Illustrative method	LO5, LO6	Oral examination
2	<b>EGS 403/1</b> Geographical research methods	CC/ OC	5	The discipline studies the theory and practice of applying geographical research methods in conducting geographical education and geographical research. The	Group work; Demonstration method;	LO4, LO5, LO6, LO7, LO12	Written exam



NJSC «KAZAKH NATIONAL WOMEN TEACHER TRAINING UNIVERSITY»  
Institute of Natural Sciences

				discipline studies the essence of geographical research methods and objects of research, basic and modern methods. Students understand the essence of geographical research methods and classify geographical methods. Uses geographical methods in conducting experimental, experimental, analytical work. When studying geographical objects, phenomena, processes, geographical methods and techniques are used to create geographical records, obtain graphic material. Develops and discusses projects.	Explanatory method; Illustrative method		
	<b>EGS 403/2</b> Recreational geography			Discipline-forms knowledge about the recreational resources of the regions and the patterns of their geographical distribution. Students know recreational concepts and concepts, ways of effective use of recreational resources. Characterizes natural recreational resources in different regions of the world by geographical factors affecting them. Defines recreational places in individual countries and regions of the world. Assesses the state of recreational resources. Compares the quality of recreational activities among themselves. Connects recreational activities and the healthcare system.	Group work; Demonstration method; Explanatory method; Illustrative method	LO4, LO5, LO7	Written exam
<b>3</b>	<b>EGS 302/1</b> Economic geography of Kazakhstan	MC/ OC	5	Discipline-characterizes the administrative-territorial division, population and labor resources, economy, economy of Kazakhstan. Classifies natural resources of Kazakhstan, branches of economy. Students will discuss the economic, social and geopolitical situation of Kazakhstan, its role and place among the countries of the world. Compares the economic development of Kazakhstan with other countries. Expresses an opinion on Kazakhstan's foreign economic relations. Assesses the current economic state of Kazakhstan. Divides the economic districts and regions of Kazakhstan.	Group work; Demonstration method; Explanatory method; Illustrative method	LO5, LO6, LO7	Oral examination



NJSC «KAZAKH NATIONAL WOMEN TEACHER TRAINING UNIVERSITY»  
Institute of Natural Sciences

	EGS 302/2 Practical geography			Discipline-forms knowledge about applied problems of geography, the importance of applied research. The discipline examines political, environmental, economic, demographic, food, energy problems and ways to solve them. Students describe the issues of territorial organization of society and nature, production and population, placement and rational use of economic facilities. Students define various geotechnical systems. Uses modern equipment and technologies to solve problems in society.	Group work; Demonstration method; Explanatory method; Illustrative method	LO5, LO6, LO7	Written exam
--	-------------------------------	--	--	---	--	------------------	--------------

**BPA-7 Biodiversity of plants and animals:**

*Module description:* Biodiversity of plants and animals was formed as a branch of biological science that studies botanical and zoological patterns. It gives a complete picture of the basic laws of the spread of life. The module examines the various levels of morphological organization of the animal and plant kingdoms, as well as the composition, similarities and differences of plant and animal cells. Students also get acquainted with the biodiversity of lower and higher plants, animals and study their structure, phylogenetic relationships, interaction with the environment, their significance and conservation. Conducts biological observations of plants and animals in natural conditions. The data obtained on the biodiversity of plants and animals make a significant contribution to the development of the systematics, evolution, and phylogeny of living organisms, which are important theoretical areas of biology.

№	Name of subject and code	Cycle/component	Credits	Subject discription	Teaching methods	LO by EP	Assessment methods
1	BPA 101 Botany		5	When mastering the course, “students describe the features of the internal and external structure of plants, study the patterns of growth and development. Can conduct analyzes on topics that will take place in laboratory classes related to cellular structure, tissues, seeds, reproduction. Students will be able to apply the comparative morphological method and the knowledge gained during scientific production and practical work. In addition, they study the natural classification of plants, methods for determining species.	Microscopic method, comparative analysis, critical thinking, case study, Stem, empirical research methods	LO8, LO9, LO11	Written exam



NJSC «KAZAKH NATIONAL WOMEN TEACHER TRAINING UNIVERSITY»  
Institute of Natural Sciences

2	<b>BPA 202/1</b> Zoology		6	As part of the study of the discipline, students systematize vertebrates and invertebrates. Study their evolution and phylogenetic relationships, vital activity, distribution in the environment. Characterize and compares structural features of invertebrates. Uses animals in natural and fixing liquids, laboratory equipment. Studies the diversity of animals, organizational features, lifestyle, origin and evolution, significance in nature and human life.	Methods of empirical research Criteria-based thinking, mental map	LO8, LO9, LO11	Written exam
	<b>BPA 202/2</b> Entomology			In the discipline "Entomology" students study the origin, systematics, morphological and anatomical features of the structure, biology, ecological features of the growth and development of insects, their practical significance. Learn the types of beneficial and harmful insects and how they are used in agriculture. Receive basic ideas about the diversity of biological objects, the importance of biodiversity for the sustainability of the biosphere, the possibility of using methods of observation, description, identification, classification, cultivation of biological objects.	Methods of empirical research criteria thinking, mental map	LO8, LO9, LO11	Written exam
3	<b>BPA 203/1</b> Ecophysiology		5	On the course, the student studies the biochemical foundations, the variability of plants on physiological and environmental factors. Analyzes the interaction of plant activity in the environment with physiological processes, temperatures, global changes under abiotic stress. Students acquire new competencies in studying whether living organisms interact with factors of the physical environment or biophysical, biochemical and physiological processes used in ecological communication with other organisms.	Methods of empirical research, Critical thinking	LO8, LO10, LO11	Written exam
	<b>BPA 203/2</b> Environmental studies			In the course of studying the discipline, students study the ecological situation of the environment, the components and evolution of the biosphere, the patterns of development of processes. Examine the concept of a	Methods of empirical research, Critical thinking	LO8, LO10, LO11	Written exam



NJSC «KAZAKH NATIONAL WOMEN TEACHER TRAINING UNIVERSITY»  
Institute of Natural Sciences

				living being and the concepts of life support and sustainable development. Form scientific thinking and outlook and a scientific approach to the biosphere, the genesis of human settlements, the structure of the fauna and flora of urban areas, the methodology of environmental monitoring.			
4	<b>BPA 304/1</b> Cytology, histology and embryology		6	In the course of studying the discipline, students master the structure and chemical composition of cells, functions, general patterns of reproduction and cell structure. Knowledge is formed about the classification of tissues, the function and formation of germ cells, the process of development and fertilization, the main stages of embryonic development. He is proficient in methods of studying the microscopic structure of cells and tissues. Defines the organic connection of histology between the sciences of anatomy, biochemistry and physiology.	Methods of cytochemistry and histochemistry, Case method	LO8, LO10, LO11	Written exam
	<b>BPA 304/2</b> Cellular pathology			In this discipline, students consider typical pathological processes characterized by a violation of intracellular homeostasis. Studies what limits the functionality of the cell and leads to its death or a decrease in life expectancy. She supplemented her knowledge of pathological disorders of cells in tissues and the body, histopathology and phytopathological molecular methods, the initial levels of malignant neoplasms. Knowledge is formed about the morphological foundations of pathological processes developing in connection with the disease in living organisms.	Microscopy, methods of cytochemistry and histochemistry	LO8, LO10, LO11	Written exam
5	<b>BPA 405/1</b> Evolutionary studies		5	The course is aimed at studying: the history of the formation of modern evolutionary theory and its main provisions; features of the processes of micro- and macroevolution; speciation concepts; the genetic structure of populations; causes of modification and mutational variability; consequences of the influence of	Case study method, business game "Brainstorm", mental map	LO8, LO10, LO11	Written exam



NJSC «KAZAKH NATIONAL WOMEN TEACHER TRAINING UNIVERSITY»  
Institute of Natural Sciences

				abiotic, biotic and anthropogenic factors on the heredity and variability of living organisms.			
	<b>BPA 405/2</b> Anthropology			This course studies the origin and evolution of human being and human races, the physical structure of human being, the morphological and physiological characteristics of ethnic and other communities of human beings. Students study the formation of human culture and civilizations, the structure of human society in different historical periods and in different territories. The proof of the modern evolutionary approach to the study of biological processes has the skills to use modern scientifically based methods, methods and means of teaching biology, including technical teaching aids, information and computer technologies.	Case study method, business game "Brainstorm", mental map	LO8, LO10, LO11	Written exam

**SHD-8 Structure, heredity and development of living organisms**

*Module description:* When studying this module, students study the macromolecules of the cell – proteins, nucleic acids and their processes. Also, they get acquainted with the material foundations of heredity, the peculiarities of the structure of the nucleus, chromosomes, DNA. Compares genomic structures of prokaryotes and eukaryotes. Studies the skills of anatomical analysis of the movements of the human body and its organs and the interaction of external and internal forces acting on it.

№	Name of subject and code	Cycle/component	Credits	Subject description	Teaching methods	LO by EP	Assessment methods
1	<b>SHD 301/1</b> Human anatomy		6	In the process of mastering the discipline, students study the shape and structure, origin and development of the human body. Systematically characterizes the shape, structure, location and topographic relationships of body parts and organs, taking into account age, gender and individual characteristics. Realizes the social significance of his future profession, becomes able to carry out professional activities. Possesses basic	Empirical research methods (observations, comparisons, measurements) ICT technology Modeling	LO9, LO10, LO11	Written exam



NJSC «KAZAKH NATIONAL WOMEN TEACHER TRAINING UNIVERSITY»  
Institute of Natural Sciences

				biological concepts, knowledge of biological laws and phenomena.			
	<b>SHD 301/2</b> Biology of ontogenesis			When mastering the course, students study the patterns of ontogenetic development of organisms. The course gives an idea of the macro- and micro-morphological, physiological-biochemical, molecular and genetic processes occurring in developing organisms, as well as the factors and mechanisms that control development processes at all stages of the ontogenesis of animal and plant organisms. Willingness to solve standard tasks of professional activity using information and communication technologies and taking into account the basic requirements of information security.	Empirical research methods (observations, comparisons, measurements) ICT technology Modeling	LO9, LO10, LO11	Written exam
<b>2</b>	<b>SHD 402/1</b> Fundamentals of genetics and molecular Biology		<b>4</b>	In the course of studying the discipline, students study the history of the development and research methods of genetics and molecular biology, as well as their relationship with other sciences. They also get acquainted with the material foundations of heredity, that is, the structural features of the nucleus, chromosome, DNA. Focusing on the laws of G. I. Mendel, i.e. solving the problems of mono- and dihybrid (interaction of non-allelic genes) crossing, determines the preservation of heredity and variability over generations. In the process of ontogenesis, he studies the method of the family tree in human genetics. Extensively examines the macromolecules of the cell – proteins, nucleic acids and their processes. They get acquainted with the mechanisms of gene expression of translation, transcription.	Laboratory-analytical method case method, team work	LO8, LO9, LO10, LO11	Written exam
	<b>SHD 402/2</b> Plant selection and animal breeding			When mastering the course, the student gets acquainted with modern methods and trends of plant and animal breeding, problems facing breeding science, methods of genetic and breeding improvement of plants. Studies the ratio of heredity and environment in the formation of the	Laboratory-analytical method, case method, team work	LO8, LO9	Written exam



				phenotype, the role of selection in improving the well-being of mankind. Acquires the basic laws and modern achievements of genetics and breeding, basic ideas about genomics, proteomics.			
3	SHD 403/1 Biochemistry		5	When mastering the course of biochemistry, students study the chemical composition of living organisms and the chemical processes occurring in them. They study the structure and properties of the most important biological compounds - proteins, nucleic acids, carbohydrates, lipids; their chemical transformations in the body and the significance of these transformations for understanding the physical and chemical foundations of the vital activity of all life on Earth. Know and apply the main theories, concepts and principles in the chosen field of activity, capable of systemic thinking.	Methods of empirical research (observation, comparison, measurement, experiment)	LO8, LO9, LO10, LO11	Written exam
	SHD 403/2 Fundamentals of Enzymology			In the Basics of Enzymology course, students learn about enzymes. They study the principles of operation of protein molecules that catalyze or inhibit biochemical reactions that underlie all biological processes and are used in various industries, agriculture and medicine. Use modern methods of processing, analysis and synthesis of field and laboratory biological information, demonstrate knowledge of the principles of compiling scientific and technical projects and reports.	Methods of empirical research (observation, comparison, measurement, experiment)	LO8, LO9, LO10, LO11	Written exam

**TMP – 9 Teaching methods and pedagogical foundations of professional activity**

**Description of the module:** The module's disciplines are aimed at students' understanding of the tasks and functions of professional activity during practice, consolidating theoretical knowledge, forming skills and abilities, expanding and developing knowledge about the profession, establishing useful contacts with colleagues, the ability to find a way out in any situation, make informed decisions, determine a professional position. Students demonstrate the forms of organization of educational work, the importance of innovative methods and methods of practical activity, the effectiveness of geoinformation technologies. During the practice, students explain the theoretical foundations of geographical science, geographical theories, patterns, conclusions. Can use geographical concepts and terms, teaching tools, research methods. Monitors the student's academic achievements, uses a system of criteria assessment, improves pedagogical skills. In practice, generalizes, analyzes, processes, develops proposals, practical materials and statistical data on the topic of the diploma.





NJSC «KAZAKH NATIONAL WOMEN TEACHER TRAINING UNIVERSITY»  
Institute of Natural Sciences

№	Name of subject and code	Cycle/ component	Credits	Subject disruption	Teaching methods	LO by EP	Assessment methods
1	<b>TMP 301</b> Methodology of teaching geography	MC/ UC	5	Discipline - forms knowledge of forms of planning and organization of educational work in the teaching of geography, innovative technologies, pedagogical methods. Students know the content of school curricula and textbooks on geography, develop lesson plans, possess a system of criteria assessment, use innovative methods and technologies, means of geographical education. Students improve their pedagogical skills by combining teaching methods and students' knowledge, open up opportunities for the development of cognitive abilities of the student.	Communication method dictionary method	LO2, LO12	Test
2	<b>TMP 302</b> Methodology of teaching biology	MC/ UC	5	During the course, students study the structure and content of the basic course of biology in a secondary school, the modern goals and objectives of teaching biology in a secondary school in the context of the implementation of the State Educational Standard of the updated content of education; develops skills in working with databases, spreadsheets. Conduct biology lessons in middle and high school, including using IT technologies. The ability to lead the educational and research activities of students.	Critical thinking, binary method, pedagogical teaching methods	LO2, LO9, LO11, LO12	Test
3	<b>PP 303</b> Pedagogical Practice	CC/ UC	6	During practice, the future young specialist is faced with a situation in which he uses the competencies received from the University, including: the student shows professional confidence, the ability to find a way out in any situation, personal qualities such as making informed decisions.	Method of specific situations (case method, case method, situational analysis method)	LO2, LO3, LO7, LO11, LO12	Report
4	<b>P(P)P 404</b> Production (pedagogical) practice	MC/ UC	16	Industrial and pedagogical practice is a type of professional practice aimed at consolidating theoretical knowledge in basic and specialized disciplines, acquiring practical skills and obtaining advanced	Method of specific situations (case method, case method,	LO2, LO3, LO7, LO11, LO12	Report



NJSC «KAZAKH NATIONAL WOMEN TEACHER TRAINING UNIVERSITY»  
Institute of Natural Sciences

				professional and organizational experience in the future program, practical work of a student as a specific specialist. During the course of industrial and pedagogical practice, the student is prepared for professional activities in all areas of a specific production situation.	situational analysis method		
<b>5</b>	<b>P(P)P 405</b> Pre -diploma (pedagogical) practice	MC/ UC	2	In pre-graduate practice, graduates summarize, process and summarize practical material on the topic of the thesis (project); analyze statistical data and practical materials; formulate conclusions, patterns, recommendations and recommendations on the topic; design the thesis in accordance with the requirements studied.	Method of specific situations (case method, case method, situational analysis method)	LO2, LO3, LO7, LO11, LO12	Report

№	Name of subject and code	Cycle/ component	Credits	Subject discription	Teaching methods	LO by EP	Assessment methods
<b>1</b>	<b>WDDP(P)PCE 401</b> Writing and defending a diploma paper (project) or passing a comprehensive exam	FA	8	The purpose of the development of the thesis (project): assessment of learning outcomes and key competencies of students who have completed the educational program. Job / project protection is a special form of checking its progress. Defense involves a comprehensive justification of the decisions made by students and an understanding of the work done. The assessment of the thesis / project is based on the student's presentation, questions and answers, as well as the results of studying the proposed teaching materials, drawings, projects, models, etc. after the examination.		LO2, LO3, LO7, LO11, LO12	



NJSC «KAZAKH NATIONAL WOMEN TEACHER TRAINING UNIVERSITY»  
Institute of Natural Sciences

				<p>The purpose of the comprehensive exam is to assess the following educational results and competencies acquired after studying the educational program. A comprehensive exam is conducted in the disciplines of the program specified in the curriculum. The level of theoretical, scientific and practical training is taken into account when assessing the knowledge gained by the student during the exam. Complex examination questions include questions collected in all special subjects taught in accordance with the curriculum. When formulating questions, the features of the program and industry components are taken into account.</p>			
--	--	--	--	--	--	--	--



### 3. RESOURCE SUPPLY OF THE EDUCATIONAL PROGRAM

#### 3.1. LIBRARY FUND

One of the important indicators of the quality of training in the educational program is the provision of students with educational, methodological, scientific literature, reference and periodicals.

The library Fund for the EP cipher and name as of June 1, 2022 is 2115 copies, including in the state language – 1409 copies, 471 copies in Russian and 235 copies in foreign languages.

The University library provides students and faculty with access to databases: IPR books, Polpred, Alembook, Web of Science, Elsevier (Scopus).

Access to the Republican interuniversity electronic library (RIEL), which combines electronic educational and scientific resources of Universities of the Republic of Kazakhstan, is provided.

Students of the educational program have access to the following scientific journals:

Bulletin of the TREASURY. Series Geography, Bulletin of Kaznatszhenpu, National Geographic, Geography and nature, Geography, biology, ecology in high school, Geography of Kazakhstan and ecology education in school and University, Biology, geography and ecology teaching methods in school, Geography in schools and universities of Kazakhstan, Environmental education in Kazakhstan, Gulstan, Taptym-Eureka, land resources of Kazakhstan, Higher school of Kazakhstan, Search, Environmental courier.

Since 2010, the library provides an opportunity for students of Kazakh National Women's Teacher Training University to get acquainted with the content of master's theses in traditional format (more than 150 titles), half of it have been converted into PDF format.

Students can also use the "Kazakh National Women's Teacher Training University's Electronic library" service, which provides access to the electronic library from a computer anywhere in the world in 24/7 format (website address: lib.kazmkpu.kz). There are about 10,000 full-text sources, more than 1,000 licensed books, 6676 scanned books by the library staff, and about 300 books that belong to the rare collection.

#### 3.2. TEACHERS STAFFING

The educational program is implemented by the Chairs Geography. Quantitative and qualitative indicators of faculty serving the educational program (disciplines of basic and major cycles):

Total number of faculty – 11 people, including:

Candidate of Sciences – 4

Ph.D – 1

Masters' – 6

The ratio of degree awarded faculty members of the EP–50 %.

The educational program is implemented by the Chairs Biology. Quantitative and qualitative indicators of faculty serving the educational program (disciplines of basic and major cycles):

Total number of faculty - 20 people, including:

Doctor of science – 1

Candidate of Sciences – 8

Ph.D – 2

Masters' – 9

The ratio of degree awarded faculty members of the EP– 60%.



Qualification characteristics of the faculty members within the educational program are reflected in the Human Resources Manual.

### 3.3. MATERIAL AND TECHNICAL BASE

The University has a modern social infrastructure. There are 3 academic buildings with a total area of 23458.8 sq. m. and a useful area of 13215.6 sq.m. in the academic buildings there are buffets and a dining room. Nonresident students are provided with a hostel. In property Kaznacheeu are 6 hostels with a total area of 23111,6 sqm and one Building of scientists for the faculty. On the territory of the University there is a medical center and psychological center "Zhan Shuagy".

Each student house has the necessary conditions for living, and the staff of the Department for coordinating the work of the hostel conducts various cultural and sports events, competitions. There are elevators and ramps for students with disabilities. Each student house has an equipped gym.

The University has a Department of security, accounting and civil defense. Public order and safety of the material base is provided by the University security service.

The Department of Geography has Geoinformation Systems No. 311, Economic and Social Geography No. 313, named after K. G. N., Professor B. A. Birmagambetov No. 314, Methods of teaching Geography No.317, Local History and recreational Geography No. 319, Physical Geography No. 320

*Practice bases:*

№	Name of company	№ and contract date
1	Gymnasium No. 62 named after Sh. Smakhanuly	№7,17.08.2020, Almaty
2	General education School No. 184,	№332, 18.02.2020, Almaty

### 4. LONG-TERM PLAN FOR THE DEVELOPMENT OF THE EDUCATIONAL PROGRAM

№	Content of the event	Implementation period	Responsible
<b>Educational and methodological direction</b>			
1	Development of syllabuses, educational and methodological complexes of disciplines	august 2023	Teaching staff of the Department of Geography, Biology
2	Preparation of textbooks and manuals	during the year	Teaching staff of the Department of Geography, Biology
3	Organization of methodological seminars	during the year	Teaching staff of the Department of Geography, Biology
4	Preparation of the main educational programs that are accredited in the academic year: preparation of explanatory notes and other structural components of the OP.	during the year	E.Tulegenov, A.Kalekeshov
<b>Research direction</b>			



5	Organize lectures by scientists from universities and research centers of foreign countries, as well as attract them to conduct educational and scientific seminars and conferences.	during the year	E.Tulegenov, A.Kalekeshov
6	Preparation of articles in scientific periodicals indexed by foreign and Russian organizations (Web of Science, Scopus, Russian science citation index)	during the year	Teaching staff of the Department of Geography, Biology
7	Formation of an international research group and creation of joint research projects of the laboratory of continuous pedagogical education with domestic and foreign universities	during the year	Teaching staff of the Department of Geography, Biology
<b>Training</b>			
8	Formation of students of the Department of active citizenship, social responsibility, a sense of patriotism, high moral and leadership qualities.	during the year	Teaching staff of the Department of Geography, Biology
9	Implementation of a set of measures for Patriotic education and formation of civic activity, social responsibility and mechanisms for unlocking the potential of students	during the year	Teaching staff of the Department of Geography, Biology
10	Participation in conferences, seminars and other events related to extracurricular activities and youth policy held by external organizations	during the year	Teaching staff of the Department of Geography, Biology
<b>Career guidance work</b>			
11	Conducting seminars and advanced training courses	during the year	Teaching staff of the Department of Geography, Biology
12	Pass and organize advanced training courses for all teaching staff	during the year	Teaching staff of the Department of Geography, Biology
<b>Career guidance</b>			
13	Participation in the Olympiad held in universities and schools	during the year	Teaching staff of the Department of Geography, Biology
14	Participation in international and national conferences, symposiums	during the year	Teaching staff of the Department of Geography, Biology