

**CATALOGUE OF ELECTIVE DISCIPLINES
UNDERGRADUATE LEVEL
«6B05203 –Geography (science)»**

Cycle of disciplines	Name of disciplines and their main sections	Work-Tank (ECTS)
GED 1	THE CYCLE OF GENERAL EDUCATIONAL DISCIPLINES (GED)	5
1.	Basis of the economy and business	5
	Social production. The essence, forms, structure of capital. Production cost. Income production in a market economy. The concept of business. Types of business activity. Theory of property, social forms of management. Goods, money. Socio-economic system. The emergence of the market. Financial system. The role of the state in business development. Macroeconomics. Resource saving. Cyclical economic development. Inflation and unemployment. Kazakhstan in the system of world economic relations	
2.	Bases of the law and anti-corruption culture	5
	Basic provisions of the Constitution, current legislation of the RK; the system of state management bodies, the terms of reference, objectives, methods of state regulation of the economy, the role of the public sector in the economy; financial law and Finance, the mechanism of interaction of substantive and procedural law; the essence of corruption, the causes of its origin; the extent of moral and legal responsibility for corruption offences; the legislation in the field of combating corruption	
3.	Health and safety of the person	5
	Life safety, its main provisions. Dangers, emergencies. Risk analysis, risk management. Security of the person. Destabilizing factors of our time. Social dangers, protection from them: dangers in the spiritual sphere, politics, protection from them: dangers in the economic sphere, dangers in everyday life. The system of life safety bodies, and legal regulation of their activities	
4.	Ecology and sustainable development	5
	Basic laws of functioning of living organisms, ecosystems of different levels of organization, biosphere as a whole, their stability; interaction of components of biosphere and ecological consequences of economic activity of the person, especially in the conditions of intensification of nature management; modern representations about concepts, strategies and practical tasks of sustainable development in various countries and RK; problems of ecology, environmental protection, sustainable development	
BD 2	CYCLE OF BASIC DISCIPLINES (BD)	
1.	Introduction to geography	5
	Structural parts-natural-territorial complexes and their components. Scientific substantiation of the territorial location of the society, rational nature management and geographical forecasting. Research methods in geography. Geography in the modern world, the main problems and prospects of geography	
	Introduction to physical geography	5
	Characteristics of physical-geographical territory: natural-territorial complexes; nature protection and rational use of natural resources: environment, relief, stage of geological development in physical geographical relation,	

	problems of nature protection. Climate, hydrosphere, lithosphere, atmosphere, interrelation of biosphere.	
2.	Ecology and Economics of nature management	5
	Physical and geographical characteristics of Kazakhstan: geographical position of the country and natural components: relief, geological structure, climate, internal waters, soils, natural zones, flora and fauna; Characteristics of large physical and geographical territories of Kazakhstan: natural and territorial complexes; nature Protection and rational use of natural resources of Kazakhstan: problems of environmental ecology, effective use of subsoil of the Republic, protection of natural monuments	
	Geography of Kazakhstan ecosystems	5
	Introduction to geography ecosystems of Kazakhstan, goals and objectives of the course, the historical formation of environmental concepts, state of the environment and the environment of Kazakhstan, geographical and ecological processes in the environment. The impact of industrial and agricultural production in Kazakhstan on the environment. Problems of green economy development	
3.	Toponymy	4
	Understanding the role of toponymy in the system of science, the formation of knowledge about the history of scientific thought in this area, the principles and methods of science, knowledge of modern schemes of classification of toponyms, a General idea of the features of regional toponymic systems of the Earth, familiarity with the diversity of toponymic facts and phenomena and the definition of their role in the modern world. The concept of place names and toponymy. The theoretical foundations of place-names. The main groups of geographical names. Factors of formation of the toponymic system. Geographical names standardization. Set of geographical names.	
	Geographical terminology	4
	The concept of geographical terminology. Characteristics of the main geographical terms. Physical geographical terms. Economic and geographical terms and their definitions. Origin of geographical names, geographical names on the territory of Kazakhstan. -River, lake, mountains, etc b the origin of the names of geographical objects.	
4.	Population geography with basic demography	6
	The basic laws of population geography, demographic rhythms, natural conditions and settlement. The importance of the geographical environment in the whole life of mankind. Systematic population growth and its regularities; racial, national, religious, etc. composition of the world population. Human resources and their use.	
	Geourbanistics	6
	The process of urbanization, the structure of urban settlements, the main ideas of urban planning, problems and prospects of urban development. The formation of the geography of cities. The concept of "Urbanization" and "Geourbanistics". Socio-geographical patterns of urbanization and its territorial manifestations. The global nature of urbanization. Economic and geographical aspects of urbanization. The essence of the urbanization process, the factors causing it. Common signs of modern urbanization.	
5.	Physical geography of Kazakhstan	5

	Physico-geographical characteristics of Kazakhstan: geographic location and natural components: relief, geological construction, climate, inland waters, soil, natural areas, flora and fauna; characteristics of the major physical-geographical territory of Kazakhstan: natural-territorial complexes; conservation and rational use of natural resources of Kazakhstan: the environment, the rational use of mineral resources of the Republic, for the protection of monuments of nature; rational use and protection of natural resources of Kazakhstan.	
	Physical and geographical zoning.	5
	The essence and content of the physical and geographical area, physical and geographical areas of a large territory of Kazakhstan, etc. Physical and geographical areas of Western Siberia, Eastern Europe, the Far East, Turan and others. Saryarka, Tien Shan, Zhetysu Alatau, Sauyr-Tarbagatai, Altai, Mugalzhar	
6.	Physical geography of continents and oceans	5
	Physical and geographical zones. The concept of continents and large regions of the world. World ocean. Physical and geographical characteristics of the world regions. Northern continents, regional overview: the Arctic. Europe. North America. Asia region: southwest, South, Southeast, Central and Eastern. Southern continents, physical and geographical features of nature: South America, Australia. Regional overview of Africa: North, West, Central, East and South. Genesis Islands: Melanesia, Micronesia, Polynesia and New Guinea. Features of the nature of Antarctica.	
	Geography of physico-geographical region	5
	Regional overview for the Northern hemisphere: the Arctic. Europe. North America. Asia region: southwest, South, Southeast, Central and Eastern. Physical and geographical features of nature in the southern hemisphere: Andean mountains, Australia and ocean Islands. Regional overview of parts of Africa: North, West, Centre, East and South. The Genesis of the Islands: East and South-East Asia, South Asia, South-West Asia and New Guinea. Features of the nature of Antarctica.	
7.	Hydrology	4
	The hydrosphere is an integral part of the geographical envelope. Formation of natural waters. The formation of the hydrosphere and its evolutionary development. Properties of water in nature. Volume and structure of the hydrosphere. Water circulation in nature. The General water circulation on the globe. Large and small turnover of water. The connection of the atmosphere, land, and hydrosphere.	
	Glaciology	4
	Modern glaciological studies. Ginstera and its borders. Stages of glaciation in the history of the Earth's planets. The area of distribution of modern icing on the globe and its volume. Continental and high-altitude areas of ice cover. Climatic and orographic snow lines. Features of distribution of a snow line in different latitudes. Patterns of occurrence and development of glaciers. The power of glaciers. Structure and movements of glaciers. Morphological types of glaciers.	
8.	Meteorology and climatology	5
	Weather and its forecasting. Climate-forming factors. Climate classification. Earth's climate. Climate change. the structure of the atmosphere; climatic factors;	

	Atmosphere and its structure and composition. Solar radiation, radiation and heat balance. The thermal regime of the atmosphere. Air pressure and wind. General circulation of the atmosphere.	
	Recreational geography	5
	The concept of recreational geography. Methodology of the study of recreational geography and relationship with other Sciences. Development of recreational geography its organization. The main problems of recreational geography, its solutions. Object of development of recreational geography study of territorial recreational system. Development of recreation, stages of its formation. The voyage of the sailors of the middle ages. Sorting animals. Animal physiology. Animal ecology.	
9.	Economic and social geography of the world	6
	Economic and social geography of the world studies the territorial organization of society, its laws and laws, territorial differentiation of socio-economic phenomena and processes. The purpose of the discipline is to gain knowledge about the world political map, understanding the laws and laws of society, the features of the world economy. Natural conditions and resources. world Nations.	
	Geographic management framework	6
	The main factors of development of natural conditions and natural resources. Environmental factor. Geodemography and population growth. Fundamentals of geopolitics. Territorial organization and economic problems. Geodemography and population growth. Fundamentals of geopolitics. Territorial organization and economic problems.	
10.	Economic and social geography of Kazakhstan	6
	Understanding the territorial organization of the economic life of society, the laws of territorial organization, social infrastructure, depending on the mode of production and the characteristics of the geographical environment. Economic and geographical position of the Republic of Kazakhstan, fuel and energy complex. Geography of industry, agriculture. Transport, services of the Republic of Kazakhstan. Specialization of economic regions of Kazakhstan, Northern Kazakhstan. South Kazakhstan Region. East Kazakhstan Region. west kazakhstan. central kazakhstan. Kazakhstan cities. Environmental problems of the country. Foreign economic relations.	
	Economic and social geography of the CIS	6
	Understanding of economic, social territorial organization, regularities of territorial organization, social infrastructure depending on the mode of production and features of the geographical environment. Economic and geographical position of the CIS, fuel and energy complex. Geography of industry, agriculture. Transport, services of the CIS. Specialization of economic regions of the CIS, North Europa, southern black earth district, East, far East, Western Europe. Central Chernozem region, environmental problems of the region. Foreign economic relations	
11.	Geography of the modern world	5
	Diversity and integrity of the modern world. Classification of world countries by socio-economic development. Economic, historical and geographical regions, regional policy, remote areas and centers. Contemporary international relations. Sustainable development concept.	

	Geo-Economics and integration processes	5
	Experience and approaches to the economical use of natural resources of the environment; the possibility of functioning of resource-saving technologies and equipment; mastering the efficiency and benefits of environmentally friendly technologies in industrial institutions; the study of the main sources of man-made pollution of the biosphere. Composition of waste water from industrial enterprises	
PD 3	CYCLE OF PROFILE DISCIPLINES (PD)	
1.	Regional geography	5
	Typology of countries. Characteristics of the countries of Europe, Asia, America, Africa and Australia. State its borders. Developed country. Developing country. Natural conditions and economy in countries. Regularities of classification of countries. Museu backward countries	
	Regional geography of the world	5
	Historical-cultural, historical-geographical zones. Research method in the field of social and economic geography. Country studies and regional geography. Regional modern world regional comparison. Natural conditions and economy in countries. Regularities of classification of countries.	
2.	Googlability	4
	Googlability-the kind of multidisciplinary knowledge, studying political processes and phenomena across the world. The purpose of the discipline is to understand the essence of socio-political processes, current trends and phenomena. The essence, trends and causes of globalization processes. World politics. The history of science-googlability.	
	Geography of service	4
	Sphere of economic and social geography. Qualitative and quantitative indicators. Service sector its socio-economic role. Features of the service. Changing the quality of service in the process of globalization, today's vision of the service sector in developed countries. The service sector in Kazakhstan, policies and services are interlinked with each other.	
3.	Political geography with the basics of geopolitics	5
	Characteristics of concepts: stages of formation of the political map, Flocks, semi-flocks, dominions, remote departments, etc. the Place of political geography among the social Sciences and Humanities. Political geography and geopolitics. The main stages of their development, theoretical and applied value. Political geography of world regions. Actual problems of the modern political map of the world.	
	Geopolitics and geocentricity	5
	Correlation of concepts of geopolitical space, society and politics. Space as a social phenomenon. The meaning of the concept of qualitative space. Features of geographical determinism. The concept, definition of geopolitics.functions of geopolitics as a science. Geopolitics as a concept and science. connection of geopolitics with other social and humanitarian Sciences.	
4.	Innovative methods of teaching geography and natural Sciences	6
	Modern methods of scientific knowledge. General geographic methods. Methods of search of scientific data and information. Analysis of scientific	

	information. Delphi, methods of attack the brain. The role of man in the evolution of the Earth; directions and actions of man in the development of scientific, technical, economic and organizational sphere; orientation to the use of new methods of intentional extraction of emerging environmental disasters.	
	Geography of innovative industries	6
	Cardinal inventions. In the old area, destroying traditions, destroying outdated ones, lead to radical changes. The resourcefulness of lamps in the history of mankind, the resourcefulness of digital technologies.Improvement, update. He often makes gradual changes, perfecting a good-natured industry, a good-natured thing, adding new advantages, and making something even more different from the former.Creating a new kind of handle, machine.	
5	Method of research	5
	Basic geographical research methods. Cartographic method. Historical method. Statistical method. The main types of graphic methods. Methods of charting. Remote control method. Economic and mathematical method. Method of geographical zoning. Methods of field research and control. The comparative-geographical method. Method of geographical modeling. Geographical forecast.	
	Field research methods	5
	Field, cartographic, theoretical views. Models, features of geographical objects, phenomena, phenomena and processes. Drawing topographic maps, topography, the way to work on the points of observation of the weather, terrain, hydrographic schemes, drawing the terrain plan.Field research methods	
6	Statistical methods in geography	5
	Statistical methods and methods of obtaining digital information in modern geography; the importance of statistical methods in geographical research; statistical observations; statistical data and classification, its foundations, rules of education; tabular and graphical representation of statistical information; basic statistical parameters; statistical study of the dynamics and interrelation of phenomena; statistical analysis and synthesis of statistical data.	
	Statistics	5
	Statistical control, collection of materials. General issues of collection, measurement, monitoring and analysis of mass statistical (quantitative or qualitative) data; the study of the quantitative side of mass social phenomena in a quantitative form. Classification of statistical methods. Applied statistics. Connection of statistics with other disciplines. Statistical analysis of actual data.	