

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	HISTORICAL AND PHILOSOPHICAL COMPETENCIES	28	1	GES 101 History of Kazakhstan	5	GC CC
			2	GES 205 Philosophy	5	GC CC
			3	GES 103 /1 Fundamentals of Legal Literacy and Anti-Corruption culture	5	GC OC
			4	GES 103/2 Fundamentals of Ecology and Safe life		
			5	GES 103/3 Fundamentals of Economics and Entrepreneurship		
			6	GES 103/4 Fundamentals of Leadership and receptivity to innovation		
			7	GES 103/5 Emotional Intellect		
			8	GES 103/6 Fundamentals of mathematical statistics		
			9	GES 103/7 Financial Literacy		
			10	GES 103/8 Ecology and Sustainable Development		
			11	GES 1(2)04 Physical Training	8	
			12	GES 206 Information and communication technologies	5	GC CC

2	SOCIAL AND POLITICAL KNOWLEDGE MODULE (SOCIOLOGY, POLITOLOGY CULTUROLOGY, PSYCHOLOGY)	8		GES 103 Social and Political Knowledge Module (Sociology, Politology Culturology, Psychology)	8	GC CC
3	LANGUAGE COMMUNICATION	20	14	GLC 101 Kazakh (Russian) Language	10	GC CC
			15	GLC 102 Foreign Language	10	GC CC
4	SUPPORTING LEARNERS AS INDIVIDUALS	17	1	SLI 201 Psychology in education and Concepts of Interaction and Communication	4	CC UC
			2	SLI 202 Educational Science and Key Theories of Learning	3	CC UC
			3	SLI 203 Inclusive Educational Environment	3	CC UC
			4	SLI 204 Age and Physiological Features of the Development of Children	3	CC UC
			5	SLI 405 Teaching Planning and Individualization of Learning	4	CC UC
5	TEACHING AND ASSESSMENT FOR LEARNING	9	1	TAL 301 Teaching Methods and Technologies	5	CC UC
			2	TAL 302 Assessment and Development	4	CC UC
6	TEACHER AS A REFLECTIVE PRACTITIONER	9	1	TRP 301 Pedagogical Research	4	CC UC
				TRP 401 Research, Development and Innovation	5	CC UC
7	TEACHER AS A FACILITATOR OF LEARNING (PEDAGOGICAL PRACTICE)	29	1	T(I)P 101 Training (introductory) practice	2	CC UC
			2	PPP 202 Psychology and pedagogical practice	2	CC UC

			3	PP 301 Pedagogical practice	5	CC UC
			4	P(P)P 401 Production (pedagogical) practice	18	CC UC
			5	P(P)P 402 Pre -diploma (pedagogical) practice	2	CC UC
8	BIOLOGY OF LIVING ORGANISMS	36	1	BLO 101 Structure and functions of plant organisms	6	CC UC
			2	BLO 202 Diversity of plant organisms	5	CC UC
			3	BLO 203 Plant Physiology	5	CC UC
			4	BLO 304 Human and Animal Physiology	5	CC UC
			5	BLO 102 Structure and functions of animals 1	5	CC UC
			6	BLO 103 Structure and functions of animals 2	5	CC UC
			7	BLO 305/1 Human Biology	5	CC OC
			8	BLO 305/2 Human Anatomy		
9	GENETICS AND EVOLUTION	23	1	GE 301 Molecular Biology	6	CC UC
			2	GE 202/1 Individual development of living organisms Cytology, histology and embryology	6	CC OC
				GE 202/2 Cytology, histology and embryology		
			3	GE 303/1 Patterns of inheritance and variability	6	CC OC
				GE 303/2 Genetics and the basis of breeding		
			4	GE 404/1 Comparative anatomy and evolution of living organisms Evolutionary teaching	5	CC OC

				GE 404/2 Evolutionary teaching		
10	BIOPEDAGOGY AND ENVIRONMENT	10	1	BE 401/1 Biogeocenology	5	CC OC
				BE 401/2 Ecology of plants, animals and humans		
			2	BE 402/1 Bioresources of Kazakhstan	5	CC OC
				BE 402/2 Flora and fauna of the world		
11	APPLIED AND INTEGRATED SCIENCES	25	1	AIS 201/1 Environmental Chemistry	5	MC OC
				AIS 201/2 Theoretical foundations of inorganic chemistry		
			2	AIS 302/1 Biochemistry	5	MC OC
				AIS 302/2 Bioorganic Chemistry		
			3	AIS 303/1 Biophysics and Bioinformatics	5	MC OC
				AIS 303/2 Scientific foundations of natural science		
			4	AIS 404/1 Biometrics	5	MC OC
				AIS 404/2 Experimental Biology and management		
			5	AIS 304/1 Microbiology with the basics of biotechnology	5	MC OC
				AIS 304/2 Applied Biology with the basics of soil Science		
12	RESEARCH IN BIOLOGY	18	1	RB 401 Conceptual Biology Training	3	MC UC
			2	RB 202/1 STEM Education in Biology	5	MC OC

				RB 202/2 Digital Technologies in Biology and artificial intelligence		
				RB 202/3 Design of STEM Education		
			3	RB 303/1 Modern approaches to the organization of biological experiment	5	MC OC
				RB 303/2 Methodology of biological research		
				RB 303/3 Research and project activities in biological education		
			4	RB 203/1 Academic Letter	5	MC OC
				RB 203/2 Content-language integrated learning in biology		
	Preparation and presentation of the diploma paper (project) or two comprehensive exams	8				
FINAL ATTESTATION		240			240	