

## 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
<b>1</b>	<b>GES -1</b> <b>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	1. <b>GES 106</b> Fundamentals of Legal Literacy and Anti-Corruption culture / 2. <b>GES 106</b> Fundamentals of Ecology and Safe life / 3. <b>GES 106</b> Fundamentals of Economics and Entrepreneurship / 4. <b>GES 106</b> Fundamentals of Leadership and receptivity to innovation / 5. <b>GES 106</b> Emotional Intellect 6. <b>GES 106</b> Fundamentals of mathematical statistics	5	GC/ OC
<b>2</b>	<b>GLC -2</b> <b>Language communication module</b>	<b>25</b>	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
<b>3</b>	<b>GER – 3</b> <b>Global Ethics and Research module</b>	<b>22</b>	1	<b>GER 201</b> Inclusive Education	6	CC/ UC
			2	<b>GER 402/2</b> Fundamentals of scientific research	10	CC/ UC

			3	<b>GER 303</b> Professional ethics and identity	6	MC/ UC
<b>4</b>	<b>BLO-4 Biodiversity of living organisms</b>	<b>42</b>	1	<b>BLO 201/1</b> Botany <b>201/2</b> Resources of medicinal plants	10	MC/OC
			2	<b>BLO 102</b> Zoology of Invertebrates	5	CC/ UC
			3	<b>BLO 103</b> Vertebrate zoology	6	CC/ UC
			4	<b>BLO 304/1</b> Bioresources of Kazakhstan <b>304/2</b> World flora and fauna	7	CC/ OC
			5	<b>BLO305</b> Phytobotany	5	CC/ UC
			6	<b>BLO306</b> Chronobiology	5	CC/ UC
			7	<b>TP 106</b> Training Practice	2	CC/ UC
			8	<b>TP 207</b> Training Practice	2	CC/ UC
<b>5</b>	<b>FAP -5 Fundamentals of anatomy and physiology</b>	<b>30</b>	1	<b>FAP 201/1</b> Human anatomy <b>201/2</b> Biology of individual development	6	CC/ OC
			2	<b>FAP302</b> Human and animal physiology	10	CC/ UC
			3	<b>FAP 403</b> Ecophysiology	4	CC/ UC
			4	<b>FAP 204/1</b> Plant physiology <b>204/2</b> Biometry	6	MC/OC
				<b>PP 305</b> Production practice	4	CC/ UC
<b>6</b>	<b>STB -6 Scientific theories of biology</b>	<b>62</b>	1	<b>STB301</b> Molecular biology and genetics	10	CC/ UC
			2	<b>STB302/1</b> Biotechnology <b>302/2</b> Cell Biotechnology	10	MC/OC
			3	<b>STB 203/1</b> Biochemistry <b>203/</b> Basics of Enzymology	6	CC/ OC

			4	<b>STB 304/1</b> Microbiology <b>304/2</b> Biotechnology of microorganisms	8	MC/OC
			5	<b>STB 205</b> Fundamentals of Cytology and Histology	10	CC/ UC
			6	<b>PP 406</b> Production practice	16	MC/ UC
			7	<b>PPP 407</b> Pre -diploma (production) practice	2	MC/ UC
7	<b>BR-7</b> <b>Biologist - researcher</b>	15	1	M (BR) 401 Discipline1	5	CC/ OC
			2	M (BR) 402 Discipline2	5	CC/ OC
			3	M (BR) 403 Discipline3	5	CC/ OC
8				<b>WDDP(P)PCE 4**</b> Writing and defending a diploma paper (project) or passing a comprehensive exam	8	FA
<b>TOTAL:</b>		<b>240</b>			<b>240</b>	