Information on educational programs of undergraduate (5B081100 Protection and Quarantine of Plants) and graduate (6M081100 - "5B081100 Protection and Quarantine of Plants ")

The objective of EP Baccalaureate is the preparation, based on moral, aesthetic, professional and scientific values, competitive and demand in the agricultural sector in the world's scientific and educational space of the new formation in the field of plant protection and quarantine.

The objective of EP Magistracy is training with a high level of professional culture, capable to formulate and solve the scientific and practical problems, engaging in research, management, teaching.

Contents of bachelor's and master set of state educational standards are SES RK 05/04/19 - 2011. Higher Education. Baccalaureate. Basic provisions SES RK 5.04.033 - 2011. Postgraduate education. Master's. Basic provisions.

Contingent learning in bachelor in 2013-2014 year is 384 people, including 184 in the official language training 200 people in Russian. At the end of the 2012-2013 academic year the department received a license for postgraduate training profession in the plant protection and quarantine. For 2013-2014 academic year was done the first set of the magistracy and the number of students on the state grant is 3 people, including - 2 in the official language, one in Russian.

Educational environment in which there is a formation of specialists in the protection and plant quarantine is the relationship conditions for the formation of personality, capable of active creativity in various areas of basic and applied sciences. Its foundation is 55 - year tradition and image of S.Seifullin Kazakh Agrotechnical University, modern technologies, developing training system electives, elective courses, intellectual competitions at various levels of support for talented students; social support for students, extracurricular activities.

Department of Plant Protection and Quarantine , the preparation and production of bachelors and masters specialty 081100 - " Plant Protection and Quarantine " is the new chair, created in January 2013 , but the specialty items were taught back in Tselinograd Agricultural Institute and has a high scientific and pedagogical human resources. At the beginning of the 2013-2014 academic year, the number of faculty and teaching and support staff of 19 employees, of whom 16 TS . Currently the department has one professor , 3 associate professors, 6 senior lecturers, 6 assistants , 1 main laboratory technician and 2 laboratory technician . A lecturer of the department is the owner of the state grant "The best teacher of the university ." The average age of TS is 45 years. Concurrently, work practices - 1 PhD, Associate Professor.

The department has a contract with specialized research institutes, SRI on the organization and practical base joint cooperation : Ltd "KazRU Execution of Plant Protection and Quarantine , <u>NPC im.A.I.Barayeva, LP «KazRU of rice ", LLP" KazRU of cotton "; SPC " Biotechnology ", OIG APK MoA , SE " RMTsFDiP " PG "Republican quarantine laboratory ," RGP " Phytosanitary ", "Agro Phoenix ", LLP " Yesil Agro" .</u>

For oriented towards professional competence training, the Department provided the-spot training in specialized institutes, centers, inviting leading scholars to give lectures to senior students, for master's.

Classrooms are equipped with chair modern educational technology ; 5 projectors , 1interactive whiteboard are operated in the research laboratory with modern equipment and instruments , one of innovative scientific center " Phyto-sanitary monitoring , protection and plant quarantine ", conducts research within the grant funding budgetary programs MES and the Ministry of Agriculture (3) and on a contractual basis (1), totaling more than 26 million tenge. The results of research are included in the learning process during the lectures and workshops.

Over the last years, in accordance with the requirements of the loan program was developed and published teaching literature on specialty disciplines, both in print and in electronic form.

With the implementation of educational programs at the Department of special attention paid to the involvement of students in research: implementation of software projects and dissertations, participation in Republican Subject Olympiad and University Republican contests and student research papers, participation in national and international scientific conferences of young scientists and students involved in work of the scientific circle "Phyto-sanitary" and etc.

Students participated in external and internal academic mobility : Hungary KazNAU.

In 2014, the first issue is scheduled bachelors ETA specialty " Protection and Quarantine of Plants."

Thus, educational programs for bachelors and masters for Soil Science and Agricultural industries are focused on creating and improving educational environment conducive to the formation of a self-sustaining and self-fulfilling personality based on the introduction of competence-based approach to education and the educational process.

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CD/MC	Fil 2111	Philosophy	3	5	4					135	82,5	30		30	22,5	52,5				3				
CD/MC	Soc 1104	Sociology	2	3	1					90	45	15		15	15	45	2							
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CD/MC	1105	sustainable	2	3	1					90	60	15		30	15	30	2							
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срумс	OBJ 1103	Basics of life safety	2	3	1					90	60	15		30	15	30	2							

срумс	OET 2107	Foundations of the economic theory	2	3	2					90	60	15		30	15	30		2						
CD/MO	OP 2109	Foundations of Law	2	3	3					90	60	15		30	15	30			2					
								Mod	lule 4	- Profe	ssiona	l Lang	uages	s -4 c	redits									
вD/MC	PK (R) Ya 3201	Professional kazkh (russian) language	2	3	5					90	60	15	_	30	15	30					2			
BD/MC	P-oIYa 3202	Professionally- oriented foreign language	2	3	5					90	60	15		30	15	30					2			
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BD/MC	NOH 1203	Inorganic and organic chemistry	3	5	2					135	82,5	30	30		22,5	52,5		3						
							N	lodu	le 6 -	Chemi	stry (p	art 2)	3 cr	edits										
BD/SC	AFH 2201	Analytical, physical and colloid chemistry	3	5	3	1		_	n	135	82,5	30	30		22.5	52,5			3					
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BD/MC	Bio1 1204	Biology	3	5	1					135	82,5	30	30		22,5	52,5	3						
BD/SC	FiR 1202	Physiology of plants	2	3	2					90	60	15	30		15	30		2					
BD/SC	Mik 1203	Microbiology	2	3	1					90	60	15	30		15	30	2						
								Me	odule 8	-Met	eorolog	gical-3	cred	its									
BD/S C	Agr 1204	Agrometeorological	3	5	2					135	82,5	30	30		22,5	52,5		3					
BD/M C	Poch 2205	Soil science	3	5	3					<u> </u>			*			52,5			3				
BD/S C	Agr 2205	Agrochemistry	3	5	4					135	82,5	30	30		22,5	52,5				3			
					ľ	Modu	le 10	- A	gricul	lture a	nd figh	t agair	ist we	eds -	5 cred	its							
BD/S C	Zem 2206	Agriculture	2	3	3					90	60	15	30		15	30			2				
PD/S C	Ger 2301	Herbology	3	5	4					135	82,5	30	30		22,5	52,5				3			
							:	Mod	ule 11	-Cro	p produ	ction -	7 cre	dits									
BD/S C	Ras 2207	Plant growing science	4	7	3,4					180	90	30	60		30	90			2	2			
BD/S C	P1Ov 2208	Fruit-and-vegetable growing science	3	5	3	1	-	_	n	135	82,5	30	30	5	22.5	52,5			3				
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BD/M C	OF 2207	General phytopathology	3	5	4			_		135	82,5	30	30		22,5	52,5				3			
							Mo	dule	12-PI	lant Di	seases	(part 2	2) - 5	credi	its								
	SE 3303	Agricultural	3	5	5					135	82,5	30	30		22,5	52,5					3		

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С	3303	identifying and																						
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BD/M	OE 2204	General entomology	4	7	3,4					180	90	30	60		30	90			2	2				
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		Module 13-Pests (part 2) - 9 credits																						
		Agricultural	3	5	5					135	82,5	30	30		22,5	52,5					3			
PD/SC	SE 3304	entomology		Ĺ						1.55	02,2		<u> </u>			-2,-								
		Harmful nematodes,	3	5	5					135	82,5	30	30		22,5	52,5					3			
PD/SC	VNKG 330:	mites and rodents		Ĺ	Ĺ						02,2													

PD/SC,	4707 330	Methods of identifying and accounting pests	3	5	6					135	82,5	30	30		22,5	52,5				3	
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	SSHTR 3209	Operation of machinery in agriculture	3	5	5					135	82,5	30	30		22,5	52,5			З		
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					Modu	le15	- Leg	, is la	tion or	n Plan	t Prote	ction a	nd Q	uaraı	ttine-3	credit	s				
PD/SC	ZNB 3207	Legislative and regulatory framework for protection plant	3	5	5					135	82,5	30		30	22,5	52,5			3		
						Mod	lule l	<u>6 - 1</u>	Fundar	nental:	s of Pla	nt Qu	arant	ine- f	, credit	ls		 			 <u> </u>

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PD/SC		control measures					_	_						_	_									
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	3309	detection of	2	3	6					90	60	15	30		15	30								
		quarantine	-							90	00		50			50								
PD/SC		organisms																						
]	Modu	le l'	7- Mei	thods a	fplant	protec	tion-	5 cre	edits									
	HZR																					3		
	3304	Chemical plant	3	5	6					135	82,5	30	30		22,5	52,5								
PD/MC	5504	protection																						
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BD/SCIC		Genetics	2	3	6					90	00		130			30						2		
	BRSR	Biotechnology in	3	5	7					135	82,5	30	30		22,5	52,5							3	
BD/SC	4211	crop and plant	_	-							,-				,-	,-							-	
	SSSK	Breeding and seed																						
	4212	production of	2	3	7					90	60	15	30		15	30							2	
BD/SC		agricultural crops																						
PD/SC	IR 4310	Plant immunity	2	3	7					90	60	15	30		15	30							2	
					Modu	ile 19)- Fw	ndan	nental	s of Ec	онотіс	s and .	Agril	ousin	ess-5 (credit	5							

	AES	Agricultural		_	7																			
	4213	economics and	3	5						135	82,5	30	30		22,5	52,5							3	
BD/SC		statistics																						
	MarA				7																			
	4214	Marketing	2	3						90	60	15	30		15	30							2	
BD/SC		Agribusiness																						
	Module 20- Apiculture-2- credits D/SC/Date 4215 A nimiture																							
BD/SC	Pch 4215	Apiculture	2	3	7					90	60	15	30		15	30							2	
	Module -21 - Storage of plant products- 3 credits																							
	THPPR	Storage technology																						
BD/SC	4216	and expertise of	3	5	7					135	82,5	_30	_30_		22,5	52,5							3	1
	4210	crop products				(_	Т	in	2	HU	ЛЕ		9	5									
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								Cyc	le of g	eneral	educat	ion dis	ciplin	1es-33	3									
Manda	atory com	ponent	34	54						1485	742,5	150	30	315	247,5	743								
								_	Cycle	ofba	sic disc	iplines	; - 64											
Manda	atory com	ponent	22	36						990	495	165	90	75	165	495								
Comp	onent sel	1	68						1935	967,5	360	240	45	322,5	968									
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Manda	atory com	oonent	5	8						225	112,5	45	30		37,5	113								
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t			its			Con	trol o	n	_	Hours	;						Dist	ributio	n at c	ourses	s and s	emeste	r	
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	FK 1101- 2101	Physical culture	8				1,2, 3,4			360	180			120	60	180	2	2	2	2				
		Professional Practice	14	15		2,4, 6 420 120 180 120 180						4		6		4								
		In total	22							780	180			120	60	180		6		6		4		
		Final certification	3	10	8					270						270								3
		Total curriculum	155	237						6900	3105	975	990	660	1043	2708	22	25	19	24	18	22	18	3
		Professional Practice, including to			Cre	dits CTD Semester				å	eks	1L	lours	3	6 certifi	Final s cation, to	inch	uding	Sen	nester	credits	weeks	hours	
		Educational			2	1	2			2		60			State e	xams	;		8	1	2	105		
		Technology Practice			e	6	4				4		90											
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		In total			1.	4							450		1	_			Ит	гого	3	6	315	

WTP graduate majoring 6M081100 " Plants Protection and Quarantine " for 2013 and 2015.

				Contro	l by sen	nester			Size	hours			Volu	me of stu	ıdying l	ours
			S		~	le			Inclu	ding .	'ork nt	'ork er		Seme	ster	
N⁰	Code of	Name of discipline	Credits	US	wor	on th ice	al	moc	s	ies	nt w udeı	nt w naste	1	2	3	4
• -	discipline		C	Exams	Course work	Report on the practice	In total	Classroom	Lectures	Laboratories	Independent work of the student	Independent work of the master	Nu	mber of seme		na
						R				Γ	Ind o	Ind o	15	15	15	21
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
<u>BD-</u> 1	Bas	ic discipline, in all	20				900	300	150	150	135	465	8	7	5	
<u>MC1.1</u>	Mar	ndatory component	8				360	120	45	75	60	180	8			
			Μ	odule 1 -]	Public	disciplin	e - 4 crea	lits	•				•			<u> </u>
BD 01	IFN 5201	History and Philosophy of Science	2	1			90	30	15	15	15	45	1/1			
		Foreign language														
<u>BD 02</u>	<u>IYA 5202</u>	(professional) *	2	1			90	30	-	30	15	45	0/2			
	1			dule 2 - To	eaching	<u>, Discipl</u>			•	1	1					
<u>BD 03</u>	<u>Ped 6203</u>	Pedagogy	2	1			90	30	15	15	15	45	1/1			
<u>BD 04</u>	<u>Psi 6204</u>	Psychology	2	1			90	30	15	15	15	45	1/1	_		
	Sel	ection component	12				540	180	105	75	75	285		7	5	
	1	Module - 3 Innovations	and res	search in	protect	ion and	plant qu	arantin	e - 4 cr	edits (2	credits	5 *)	T	1		
SC 01	MODNIR5205	Methods of experimental work in scientific research	2	2			90	30	15	15	15	45		1/ 1		
<u>SC 02</u>	IMONIZKR 5206	Methods of research in the plant protection and quarantine	2	2			90	30	15	15	15	45		1/ 1		
	1	1	Modu	ıle 4 - Bio	techno	logy in F	Plant Pro	tection	- 3 cred	lits (2 c	redits *	·)	1	1	<u> </u>	-

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	BMZKR 520															
<u>SC 02</u>		protection and plant	3	2			135	45	15	15	15	75		2/1		
		quarantine														
	·	Mo	dule 5 M	odern tec	hnologi	es of fie	ld crops	cultiva	tion - 2	credit	5					
		Modern technologies of														
<u>SC 03</u>	STWSK 5208	cultivation of agricultural	2	3			90	30	15	15	15	45			1/1	
		crops														
			<u>Aodule 6</u>	External	factors	in plan									. <u> </u>	
<u>SC 04</u>	<u>BK5209</u>	bioclimatology	3	3			135	45	30	15	15	75			2/1	
<u>SD-1</u>	Speci	alized disciplines, in total	22				990	330	195	135	135	525	4	8	10	
<u>MC 2</u> .1		Compulsory component	2				90	30	15	15	15	45				
									_	10	10	-15				
	ſ		Modu	ıle 7 - Phy	tosanit	ary moi	nitoring	- 2 crec	lits			1	1			
		Phytosanitary monitoring of	2	1												
		dangerous pests	2	1			90	30	15	15	15	45	1 / 1			
MC 2.1	FMOVO5301															
SC 2.2		Elective component	20				900	300	180	120	120	480				
		• • •			_		_					•	•			
			Modul	e 8 - Plant	t Protec	tion Sys	stem - 3	credits	1	1	1	1	1		I I	
a a 1			2	2			125	4.5	20	1.5	1.5	75		0 / 1		
<u>SC 2.1</u>	ISZRWO5302		3	2			135	45	30	15	15	75		2 / 1		
		protecting plants from pests														
		·	Module	9 - Phyto	sanitary	y situati	ion cenos	ses - 4 c	redits		1	1				
SC 2.2	FOR 5303	Phyto-sanitary optimization of	2	3			90	30	15	15	15	45			1/1	
<u>SC 2.2</u>	<u>FUR 3305</u>	crop production in	2	3			90	50	15	13	15	43			1/1	
		Phyto-sanitary optimization of		1	1	1	1		1	1		1				
SC 2.3	FOPO 5304	a fruit and vegetable growing	2	3			90	30	15	15	15	45			1/1	
·····				_					_	-	_	_			-	
			Moo	dule 10 - I	Plant qu	arantin	e -6 crea	lits		1		1	1		I	
<u>SC 2.4</u>	<u>WKR 5305</u>	plant quarantine	3	3			135	45	30	15	15	75			2/1	
SC 2.5	WKR 5306	Internal plant quarantine	3	2			135	45	30	15	15	75		2/1		
<u> 3C 2.3</u>	<u>WKK 3300</u>	momun plunt quarantino	3	۷			133	43	50	13	13	15		<i>∠</i> / 1		

		М	odule 11 -	Methods	of Plan	t Prote	ction and	Quara	ntine -	4 cred	its					
<u>SC 2.6</u>	<u>STZR 5307</u>	Modern technology Plant Protection and Quarantine	2	1			90	30	15	15	15	45	1/1			
<u>SC 2.7</u>	<u>MMZR 5308</u>	Microbiological method in plant protection	2	2			90	30	15	15	15	45		1/1		
			Module	e 12 - Fina	ancial su	upport	for Plant	Protec	tion an	id Qua	rantine	- 3 credi	ts			
<u>SC 2.8</u>	<u>GSOZKR</u> 5309	State system for ensuring the plant protection and quarantine	3	3			135	45	30	15	15	75			2/1	
		In total	42				1890	630	345	285	270	990	12	15	15	
Researc	h work		7	1,2,3,4			840	45				420	*	*	*	*
Pr	actice E	ducational	3	3			90*	45				45			3 wk.	*
	r	esearch	3	2,4			480*	45				315		8 wk.	4 wk	*
	1	. Comprehensive Exam	1	4			150	60				360				*
	al state	1. Decoration and protection of backbone's Dissertation	3	4			150	60								*
	I	n total	59				3600	885			270	2445	12	15	15	*