Non-Commercial Joint-Stock Company
«Kazakh National Agrarian Research University»

AGREED
Head of the «Aidarbayev» PF
_____ Ye.Aidarbayev
«___» _____2024

APPROVED
Chairman of the Board – Rector
_____ A.Kurishbaev
«___» _____2024

EDUCATIONAL PROGRAM

«6B08201-Technology of Livestock Production»

Awarded degree: bachelor of agriculture in Educational Program
«6B08201-Technology of Livestock Production»

Almaty 2024

Approved at the meeting of the Department «Zooengineering»
Protocol №5, «16» 01 2024 y.

Head of the department _____ Sh. Alylkanova

Considered at meetings Academic Committee of the Faculty of «Zooengineering and food production technology»
Protocol № 4 « 30 » 01 2024 y.

Chairman of the AC of the faculty _____ K.Iskakova

Reviewed by the Educational Methodological Council of the University and recommended to the Academic Council
Protocol № 4 « 01» 02 2024 y.

Chairman of the EMC of the University _____ A. Abdyrov

The educational program was approved at the meeting of the Academic Council of KazNARU
Protocol № 9, «01» 03 2024 y.

Developers:

Dean of the Faculty B. Yerenova

Head of Department Sh. Alylkanova

Teacher:
Candidate of Agricultural Sciences., Assoc. professor Ye.Baimazhi

Students of the 4 year D.Augalikyzy

Graduating student of 2023 N.Turalyk

Workaday:

Head of the «Aidarbayev» PF Ye.Aidarbayev

Agreed:

Head of the Educational Programs Design Department Zh. Kussainova

Field of application

It is intended for realization of preparation of bachelors under the educational program «6B08201-Technology of Livestock Production» in NCJSC «Kazakh national agrarian university»

Regulations

«On Education» The Law of the Republic of Kazakhstan dated 27 July, 2007 No. 319-III;

Order of the Minister of Science and Higher Education of the Republic of Kazakhstan dated July 20, 2022 №2;

Classifier of training programs for personnel with higher and post-graduate education. Order of the Minister of Education and Science of the Republic of Kazakhstan of October 13, 2018 No. 569;

Standard Rules for the activities of educational organizations implementing educational programs of higher and (or) postgraduate education. Order of the Minister of Education and Science of the Republic of Kazakhstan of October 30, 2018 No. 595;

Rules of the organization of the educational process on credit technology of training. Order of the Minister of Education and Science of the Republic of Kazakhstan dated October 12, 2018 No. 563;

Algorithm of inclusion and exclusion of educational programs in the Register of educational programs of higher and postgraduate education. Order of the Minister of Education and Science of the Republic of Kazakhstan No. 665 dated December 4, 2018;

Professional standard: "Breeding birds" Appendix No. 21 to the order of the Acting Chairman of the Board of the National Chamber of Entrepreneurs of the Republic of Kazakhstan "Atameken" No. 190 dated 10/26/2022.

Professional standard: "Breeding of dairy camels" Appendix No. 11 to the order of the Acting Chairman of the Board of the National Chamber of Entrepreneurs of the Republic of Kazakhstan "Atameken" No. 190 dated 10/26/2022.

Professional standard: "Breeding activities (breeding) in animal husbandry" Appendix No. 25 to the order of the Deputy Chairman of the Board of the National Chamber of Entrepreneurs of the Republic of Kazakhstan "Atameken" No. 263 dated 12/26/2019

The website of NCE Atameken http://atameken.kz/

1. Passport of the educational program

Code and classification of the field of education	6B08 Agriculture and bioresources
Code and classification of training areas	6B082-Livestock
Code and name of the educational program	«6B08201-Technology of Livestock Production»
Type of educational program	Active
The purpose of the educational program	Training of highly qualified personnel with professional skills in the field of livestock production technology
ISCED level	6
NQR level	6
ORC level	6
Application number to license for referral staff training	KZ89LAA00031870 05.08.2021
Accreditation of the OP Name of accreditation body Duration of accreditation	IAAR Registration number AB 3902 KZ89LAA00031870, 04/22/2022 - 04/21/2027
Degree awarded	Bachelor of Agriculture under the educational programme «6B08201-Technology of Livestock Production»
Learning outcomes	Table 2
List of qualifications and positions	- researcher of agricultural production; - research engineer (general profile); –poultry technologist; - specialist in breeding farm animals; - specialist in the maintenance and feeding of farm animals; - Technologist for the production of livestock products
Area of professional activity	Zootechny, organizational and managerial activities, research, educational activities on the technology of production of animal products.
Sphere and object of professional activity	- state institutions of the Ministry of Agriculture, livestock farms of various forms of ownership, poultry farms, racetracks, breeding farms and breeding plants, zoos, scientific laboratories, nature reserves, livestock companies, and vocational and technical educational institutions.
Functions of professional activity	- organization and management of technology for the production of high-quality and environmentally friendly livestock and poultry products; - improvement of breeding and productive qualities of animals; - organization, assessment of the quality and harvesting of feed, standardized feeding of farm animals and birds; - organization of animal husbandry technology in accordance with zoohygienic requirements; - participation in the Republican targeted scientific programs of the Ministry of Agriculture and the Ministry of Education and Science of the Republic of Kazakhstan of program-targeted and grant funding; - introduction of scientific developments into production; - marketing and marketing of livestock products.
Types of professional activity	**1. Evaluation:** - carries out breeding work to improve the breeding and productive qualities of livestock and poultry, breeding young animals;

	- organizes the rational use of feed, pastures; - ensures the introduction of progressive methods of keeping, feeding and caring for livestock on farms; - determines the mode of keeping animals (temperature, humidity, gas exchange, etc.) and monitors its compliance; - controls the quality of livestock products, studies the causes of its deterioration and seeks to eliminate them; - monitors the timing and schedules of the sale of livestock products, sorting and culling of livestock for sale; - determines the conformity of manufactured products with GOST requirements, participates in the certification of product quality when selling it to procureers, weighing animals at the meat processing plant; - selects and uses cost-effective technologies for the production and sale of livestock products; - carries out planning of livestock production and accounting of the quantity of products produced; - organizes the work of a team of performers engaged in the production of livestock products; - participates in the assessment of the economic efficiency of production activities; - ensures safety at the production site. **2. Constructive:** - ability to develop projects of tasks on animal husbandry and ensure their implementation; - the ability to work to increase the productivity of animals, improve the reproduction of the herd and increase the yield of young animals; - the ability to organize the rational use of hayfields, pastures and other forage lands; - ability to effectively use technological equipment; - ability to organize control milking, weighing of animals; compilation of the turnover of the herd movement; - ability to maintain zootechnical documentation; -organize accounting and maintenance of established reporting on animal husbandry using modern information and technological programs; - ability to carry out quality control of manufactured products in accordance with the standards; - ability to calculate the main technical and economic indicators of the activity of an agricultural site, workshop; - ability to evaluate the effectiveness of production activities. **3. Information technology:** - to carry out organizational and technological management of animal husbandry of the department (farm, agricultural plot); - develop draft tasks on animal husbandry and ensure their implementation; - on the basis of scientific data and best practices to organize and plan activities aimed at improving the breeding structure and reproduction of the herd, feeding and conditions of livestock; - analyze the effectiveness of activities carried out on the farm; - to monitor the work of all services from the point of view of a specialist in the field of animal husbandry; -implementation of quality control of manufactured products in accordance with the standards; - to carry out the selection and placement of personnel;

	- to organize training of young specialists in order to improve professional skills; - to communicate with higher-level, external organizations (on the introduction of new methods of work, claims to product quality); - predict and anticipate the quality of the future herd, its productivity; - maintain accounting documentation, make conclusions on it and plan further activities.
Be competent	- in matters of organization, production of livestock products in accordance with international and domestic standards; - to increase the productivity of farm animals and poultry, the quality of products; - on the scientific organization of work, computer methods of collecting, storing and processing information used in the field of his professional activity; - in legal matters to resolve disputes arising in the collective and other business entities.

2. Learning outcomes in EP

Codes	Learning outcome
LO1	Demonstrate knowledge and understanding of the history of Kazakhstan, philosophy, biophysics and mathematics, as well as formulate a hypothesis and conduct professional conversations in the state, Russian and English languages, interpret knowledge of anti-corruption, social, economic, legal, cultural, moral and ethical aspects and a healthy lifestyle.
LO2	Choose the most modern methods of scientific research in animal husbandry, describe the physical characteristics of the environment, argue for life safety tools and systems, understand the principles of financial literacy, support trends in the development of information and communication technologies and entrepreneurship, practice computer science in the field under study.
LO3	To characterize the biological features of the individual development of farm animals, as well as to apply theoretical and practical knowledge to solve morphological, physiological, biochemical, microbiological, zoological and environmental problems in the field of animal husbandry.
LO4	Apply theoretical and practical knowledge in solving professional tasks in the organization of agribusiness, demonstrate knowledge and understanding of zoohygienic requirements, solve problems of veterinary medicine, mechanization processes, biotechnology of farm animals and birds.
LO5	Apply knowledge at a professional level in breeding, feeding farm animals, birds and evaluate the quality and safety of their products, create a solid stock of feed, as well as recommend livestock products for standardization and certification.
LO6	Have the training skills to carry out scientifically based work to increase productivity and breeding qualities, as well as improve the reproduction of farm animals and birds bred in different regions of the country in enterprises of various forms of ownership.
LO7	Apply knowledge and understanding of genetic research methods, patterns of variability and inheritance of traits, analyze biometric processing of economically useful selected traits of farm animals and birds, as well as apply the learning skills necessary for independent continuation of further education
LO8	Demonstrate knowledge during the examination of the quality of livestock products and recommend the digitalization of technological processes, rank new technologies for the primary processing of animal raw materials, solve tasks related to the export and import of breeding animals at a professional level.

2. Content of the educational program

№	CC/UC/OC	Code of discipline	Name of the discipline, forming competencies	in academic credits	Code of discipline							Distribution of credits by course and semester								Department 1	Form of con trol
					in academic credits	Classroom				Extracurricular		1 курс		2 курс		3 курс		4 курс			
						Lectures	Practical lessons	Laboratory lessons	Others (practices)	IWSL	IWS	1	2	3	4	5	6	7	8		
	GES	**Жалпы білім беретін пәндер циклі /Цикл общеобразовательные дисциплины/ General education subjects cycle**		**56**	**1680**	**75**	**585**	-		**300**	**720**										
1		KTM/IKG/ HOKS 1101	Қазақстан тарихы /История Казахстана/ History of Kazakhstan	5	150	15	30			30	75	5								22	State exam
2	CC	Fil/Phi 2102	Философия/ Philosophy	5	150	15	30			30	75			5						22	exam
3	CC	SHT/IYa/FL 1107. 1119	Шетел тілі /Иностранный язык/ Foreign language	10	300		90			60	150	5	5							22	exam
4	CC	KOT/KRYa /KRL 1108. 1120	Қазақ (Орыс) тілі / Казахский (Русский) язык/ Kazakh (Russian) language	10	300		90			60	150	5	5							22	exam
5	CC	AKT/IKT/IACT 2109	Ақпараттық-коммуникациялық технологиялар / Информационно-коммуникационные технологии / Information and Communication Technologies	5	150	15	30			30	75			5						21	exam
6	CC	ASBMASMP/MSPZSPKP/SAPKMSSSCSP 1110	Әлеуметтік-саясаттану білім модулі (әлеуметтану, саясатану, мәдинеттану, психология) / Модуль социально-политических знаний (социология, политология, культурология, психология)/ Social and political knowledge module (Social Studies,Political Studies, Cultural Studies, Psychology)	8	240	15	45			60	120	8								29	exam

7	OC	KSZhKM/PAK/LAAC C 2104	Құқық және сыбайлас жемқорлыққа қарсы мәдениет/Право и антикоррупционная культура/Law and anti-corruption culture	5	150	15	30			30	75			5						15	exam
		Eko 2121	Экономика/ Economy																	22	
		Eko 2106	Экология/Ecology																	11	
		TAK/ BZh/ LS 2111	Тіршілік әрекетінің қауіпсіздігі/Безопасность жизнедеятельности/ Life safety																	17	
		Kas/ Pre/ Ent 2112	Кәсіпкерлік/Предпринимательство/ Entrepreneurship																	22	
		GZN/ ONI/ FOSR 2113	Ғылыми зерттеулердің негіздері/ Основы научных исследований/ Fundamentals of Scientific Research																	16	
		KSN/ OFG/ BOFL 2114	Қаржылық сауаттылық негіздері/ Основы финансовой грамотности/ Basics of financial literacy																	13	
8	CC	DSH/FK/PC 1115. 1116. 2117.2118	Дене шынықтыру / Физическая культура/ Physical Training	8	240		240					2	2	2	2					23	exam
		Cycle of basic disciplines		**127**	**3810**	**330**	**465**	**270**	**120**	**660**	**1965**										
		Module 1. Development and management in animal husbandry		23	690	60	120	15	20	120	355										
9	CC	FBN/FOB/PWFOB 1201	Физика биофизика негіздерімен/ Физика с основами биофизики/ Physics with the basics of biophysics	5	150	15	15	15		30	75	5								22	exam
10	CC	KG/KN/CS 1253	Компьютерлік ғылым/ Компьютерные науки/ Computer Science	5	150	15	30			30	75		5							21	exam
11	CC	DDB/BIR/BOID 1223	Дара даму биологиясы / Биология индивидуального развития/ Biology of individual development	6	180	15	45			30	90		6							16	exam
12	CC	Mat 1224	Математика/ Mathematics	5	150	15	30			30	75		5							22	exam
	CC	OP/UP/TP 1226	Оқу практикасы /Учебная практика/ Training practice	2	60				20		40		2							16	dif. credit
		Module 2 – Life Science		26	780	75	75	90	0	150	390										

13	CC	BMAON/BOK/BWTBOFP 2225	Ботаника мал азығын өндіру негіздерімен/ Ботаника с основами кормопроизводства/ Botany with the basics of feed production	6	180	15	15	30		30	90				6					13	exam
14	CC	Bio 2227	Биохимия/ Biochemistry	5	150	15	15	15		30	75				5					9	exam
15	CC	Zoo 2228	Зоология/ Zoology	5	150	15	15	15		30	75			5						26	exam
16	CC	AMM/MSZh/ MOFA 2245	Ауылшаруашылығы малдарының морфологиясы / Морфология сельскохозяйственных животных/ Morphology of farm animals	5	150	15	15	15		30	75			5						9	exam
17	CC	ASHMF/FSZh/POFA 2229	Ауылшаруашылығы малдарының физиологиясы / Физиология сельскохозяйственных животных/ Physiology of farm animals	5	150	15	15	15		30	75				5					9	exam
		Module 3– Managing genetic resources		16	480	30	60	15	50	60	265										
18	CC	Bio 3248	Биометрия/ Biometrics	6	180	15	45			30	90					6				16	exam
19	CC	ZhG/GZh/AG 2231	Жануарлар генетикасы/ Генетика животных/ Animal genetics	5	150	15	15	15		30	75			5						16	exam
	CC	OP/PP/PP 2232	Өндірістік практика 1/ Производственная практика 1/ Production practice 1	5	150				50		100				5					16	dif. credit
	CC	***Module 4– The science of animal health protection and automation in animal husbandry***		10	300	30	30	30		60	150										
20	CC	Zoo 3246	Зоогигиена/ Zoogiena	5	150	15	15	15		30	75						5			8	exam
21	CC	MSHMA/MAZh/MAAOL 2234	Мал шаруашылығын механикаландыру және автоматтандыру/ Механизация и автоматизация животноводства/ Mechanization and automation of livestock	5	150	15	15	15		30	75				5					19	exam
		Module 5-Quality of livestock products		11	330	30	45	30	0	60	165										
22	CC	MOSS/ SSPZh/ SACOLP	Мал шаруашылығы өнімдерін стандарттау және сертификаттау/	5	150	15	30			30	75					5				16	exam

		3235	Стандартизация и сертификация продукции животноводства/ Standardization and certification of livestock products																		
23	ОС	MSHAOTS/ ETPOZhS/ EATOPPOARM 4310	Мал шикізатын алғашқы өңдеу технологиясы және сараптамасы / Экспертиза и технология первичной обработки животного сырья/ Expertise and technology of primary processing of animal raw materials	6	180	15	15	30		30	90							6		16	exam
		ATMEI/ EIPZhPZh/ EAIOBA 4310	Асыл тұқымды малдардың экспорты мен импорты/ Экспорт, импорт племенных животных и продукции животноводства/ Export and import of breeding animals																		
		Module 6 – Animal welfare		10	300	30	30	30	0	60	150										
24	ОС	VN/ OV/ BOVM 3243	Ветеринария негіздері/ Основы ветеринарии/ Basics of Veterinary Medicine	5	150	15	15	15		30	75					5				24	exam
		Mik/ Mic 3244	Микробиология/ Microbiology																	7	
25	КВ	VR 3245	Ветеринарлық репродуктология/ Ветеринарная репродуктология/ Veterinary Reproductology	5	150	15	15	15		30	75					5				4	exam
		VA/ VO 3249	Ветеринарлық акушерлік/ Ветеринарное акушерство/ Veterinary Obstetrics																		
		Module 7 – Animal Science		31	930	75	105	60	50	150	490										
26	СС	MA/ KSZh/ FFA 3249. 3250	Мал азықтандыру 1, 2/ Кормление сельскохозяйственных животных 1,2/ Feeding of farm animals 1,2	10	300	30	30	30		60	150					5	5			16	exam
27	СС	ASHMOS/ RSSZh/ CASOAA 3251. 3252	Ауыл шаруашылығы малдарын өсіру және селекциясы 1,2/ Разведение и селекция сельскохозяйственных	10	300	30	30	30		60	150					5	5			16	exam

			животных 1,2/ Breeding and selection of farm animals 1,2																			
	CC	OP/ PP/ PP 3309	Өндірістік практика / 2Производственная практика 2/ Production practice 2	5	150				50		100						5			16	dif. credit
28	OC	AU/ OA/ AO 3255	Агробизнесті ұйымдастыру/ Организация агробизнеса/ Organization of agribusiness	6	180	15	45			30	90						6			14	
		AE 3256	Аграрлық экономика/ Аграрная экономика/ Agricultural economy																		
		Cycle of profile disciplines		**51**	**1530**	**120**	**135**	**195**	**50**	**240**	**790**										
		Module 8 – Innovations in animal husbandry		10	300	30	45	15	0	60	150										
29	OC	ZhB/ BZh/ AB 3311	Жануарлар биотехнологиясы/ Биотехнология животных/ Animal Biotechnology	5	150	15	15	15		30	75						5			16	exam
		KB/ CB 3312	Клеткалық биотехнология/ Клеточная биотехнология/ Cellular biotechnology																		
30	OC	MSHC/ CZh/ DIAH 4313	Мал шаруашылығындағы цифрландыру/ Цифровизация в животноводстве/ Digitalization in animal husbandry	5	150	15	30			30	75								5	16	exam
		MSHAZhU/ OPRZh/ OOBWIAH 4314	Мал шаруашылығындағы асылдандыру жұмыстарын ұйымдастыру/ Организация племенной работы в животноводстве/ Organization of breeding work in animal husbandry																		
		Module 9 – Large-scale animal husbandry		18	540	45	45	90	-	90	270										
31	CC	IKMSH/ Sko/ CB 4303	Ірі қара мал шаруашылығы/ Скотоводство/ Cattle breeding	6	180	15	15	30		30	90								6	16	exam
32	CC	ZhSH/ Kon/ HB 4307	Жылқы шаруашылығы/ Коневодство/ Horse breeding	6	180	15	15	30		30	90							6		16	exam
33	CC	TSH/ Ver/ CB 4308	Түйе шаруашылығы Верблюдоводство/ Camel breeding	6	180	15	15	30		30	90								6	16	exam
		Module 10 – Small-scale animal husbandry		23	690	45	45	90	50	90	370										
34	CC	KESH/ OK/ SAGF 4304	Қой және ешкі шаруашылығы/ Овцеводство и козоводство/ Sheep and goat farming	6	180	15	15	30		30	90							6		16	exam
35	CC	SHSH/ Svi/ PB 4305	Шошқа шаруашылығы/ Свиноводство/ Pig breeding	6	180	15	15	30		30	90							6		16	exam

36	CC	KSH/ Pti/ PF 4306	Құс шаруашылығы/ Птицеводство/ Poultry farming	6	180	15	15	30		30	90							6		16	exam
	CC	KP/ PP/ PP 4315	**Кәсіби практика/ Профессиональная практика/** Professional practice	5	150				50		100								5	16	dif. credit
			Қорытынды аттестация/ Итоговая аттестация/ Final assestment	**8**	**240**				**80**		**160**										
			Қорытынды аттестация/ Итоговая аттестация/ Final assestment	8	240				80		160								8	16	
			Барлық кредиттер/ Всего кредитов / **Total credits**	**242**	**7260**	**525**	**1185**	**465**	**250**	**120 0**	**3635**	**30**	**30**	**32**	**28**	**31**	**31**	**30**	**30**		

Department number	The name of the department
1	Agronomy, breeding and biotechnology
2	Horticulture, plant protection and quarantine
3	Soil science, agrochemistry and ecology
4	Obstetrics, surgery and reproduction biotechnology
5	Biological safety
6	Clinical veterinary medicine
7	Microbiology, Virology and Immunology
8	Veterinary sanitary examination and hygiene
9	"Physiology, morphology and biochemistry" named after N.O. Bazanova
10	Forest resources, hunting and fisheries
11	Land resources and cadastre
12	Water resources and land reclamation
13	Accounting, audit and finance
14	"Management and organization of agribusiness" named after H.D. Churin
15	Right
16	Zooengineering
17	Technology and food safety
18	Agricultural machinery and mechanical engineering
19	"Machine use" named after I.V. Sakharov
20	Energy saving and automation
21	IT technologies and automation
22	General education subjects
23	Physical education and sports
24	Military Department

3. Module Competency Map

Competence code	Educational competence	Learning outcomes
CC1	They form the ideological, civil and moral positions of the future specialist, competitive on the basis of knowledge of information and communication technologies, building communication programs in the state, Russian and foreign languages, orientation to a healthy lifestyle, self-improvement and professional success;	1) evaluate the surrounding reality on the basis of worldview positions formed by knowledge of the fundamentals of philosophy, which provide scientific understanding and study of the natural and social world by methods of scientific and philosophical cognition; 2) interpret the content and specific features of the mythological, religious and scientific worldview; 3) to argue their own assessment of everything that is happening in the social and industrial spheres; 4) to show a civic position based on a deep understanding and scientific analysis of the main stages, patterns and peculiarities of the historical development of Kazakhstan; 5) use methods and techniques of historical description to analyze the causes and consequences of events in the modern history of Kazakhstan; 6) assess situations in various areas of interpersonal, social and professional communication, taking into account basic knowledge of sociology, political science, cultural studies and psychology; 7) synthesize knowledge of these economic and legal sciences as a modern product of integrative processes; 8) use scientific methods and techniques of research of a specific science, as well as the entire socio-political cluster; 9) develop their own moral and civic position; 10) to operate with social, business, cultural, legal and ethical norms of the Kazakh society; 11) demonstrate personal and professional competitiveness; 12) apply in practice knowledge in the field of social sciences and humanities, which has worldwide recognition; 13) to make the choice of methodology and analysis; 14) summarize the results of the study; 15) synthesize new knowledge and present it in the form of humanitarian socially significant products; 16) to engage in communication in oral and written forms in Kazakh, Russian and foreign languages to solve the problems of interpersonal, intercultural and industrial (professional) communication; 17) implement the use of language and speech means based on the system of grammatical knowledge; analyze information in accordance with the communication situation; 18) evaluate the actions and actions of communication participants. 19) use various types of information and communication technologies in personal activities: Internet resources, cloud and mobile services for the search, storage, processing, protection and dissemination of information; 20) build a personal educational trajectory throughout life for self-development and career growth, focus on a healthy lifestyle to ensure a full-fledged social
CC2	They form a system of general competencies that ensure the socio-cultural development of the personality of the future specialist on the basis of the formation of his ideological, civil and moral positions;	
CC3	Develop the ability to interpersonal social and professional communication in the state, Russian and foreign languages;	
CC4	Contribute to the development of information literacy through the mastery and use of modern information and communication technologies in all spheres of their lives and activities;	
CC5	Demonstrate knowledge of economic, legal laws and phenomena in society at a professional level, as well as be competent in setting up experience in research and entrepreneurship;	
CC6	They form a personality capable of mobility in the modern world, critical thinking and physical self-improvement.	
	Basic competencies	**Learning outcomes**
CC7	**Module1. Development and management in animal husbandry** Demonstrate knowledge about the basics of financial and mathematical literacy, apply	- have a holistic view of the development trends and prospects of animal husbandry in the world and in Kazakhstan. - to assess the financial stability, liquidity, solvency, cost intensity, profitability of enterprises on the basis of financial statements;

	knowledge about biophysical and biological phenomena at a professional level, as well as be competent in the branches of the agro-industrial complex.	- use mathematical, biophysical methods and techniques for the study of a specific science; - ability to use knowledge of accounting patterns and individual characteristics of the development of farm animals and poultry; - possess the skills of evaluating investment projects, financial planning and forecasting, taking into account the role of financial markets and institutions;
CC8	**Module 2. Life Science** They study biological, zoological, morphological, physiological features and biochemical properties of a living organism of various farm animals, apply theoretical knowledge, formulate arguments and solve problems in the field of animal husbandry	- demonstrate knowledge and understanding in obtaining high and sustainable yields, taking into account the botanical characteristics of forage crops, as well as their rational use, both in field farming and in natural and seeded hayfields and pastures, aimed at achieving the formation of a highly efficient livestock feed base in accordance with the competencies being formed. - to know the essence of chemical transformations occurring in organisms, the mechanisms of their regulation and their role in ensuring the vital activity of the organism; - acquisition of knowledge of the structure and vital functions of the animal's body, ensuring the normal activity of all organs and systems. - interpretation of performance indicators of various organs and systems based on laboratory, functional physiological and morphological research methods.
CC9	**Module 3. Management of genetic courses** Demonstrate knowledge in matters of inheritance and variability of economically useful traits, apply methods of collection, analysis and interpretation of materials in the field of animal husbandry	- to know the types of inheritance of traits and species of animals, the nature of genetic diseases and general genetic issues, methods of grouping primary data and groups of biometric indicators; – decipher and characterize animal karyotypes, determine the frequency of a gene in a group of animals, analyze biometric indicators calculated depending on the chosen specialty by mathematical methods; – carry out statistical processing of features taken for scientific analysis or research.
CC10	**Module 4. Animal health science and automation in animal husbandry** They form an idea of zoo hygiene, mechanization and automation in animal husbandry, apply theoretical and practical knowledge in compliance with the hygienic requirements of keeping farm animals and birds	– apply advanced technologies for the production of livestock products; – use highly efficient machines and equipment for complex mechanization and automation of technological processes on farms and complexes; – own the rules of operation and design of technological equipment of farms and complexes; – to know the importance of zoo hygiene in veterinary medicine and animal husbandry; – to demonstrate knowledge and ideas in the field under study when meeting hygienic requirements for air, water, feed, organization of maintenance in stalls and pastures;
CC 11	**Module 5. Quality of livestock products** Contribute to the organization and conduct of standardization, certification, expertise, export and import of livestock products and raw materials in accordance with international standards and regulatory legal acts of the Republic of Kazakhstan	- apply methodological materials, technology for the development of standards, the system of state supervision of compliance with mandatory requirements of regulatory documents, rules for the development of standards, amendments and cancellations of standardization, certification -know the rules and procedure for the examination of livestock raw materials and their compliance with technical regulations. - master the technological process of exporting and importing animals, apply the acquired knowledge for planning and carrying out work on sales and logistics of products.
CC	**Module 6. Animal welfare**	-specify the external and internal causes of animal diseases;

12	Master and solve professional tasks in the field of veterinary medicine, obstetrics and gynecology	the main signs of animal diseases and methods of prevention, first aid to a sick animal; creating optimal conditions for the patient; -apply the simplest diagnostic, surgical and therapeutic methods; therapeutic and preventive measures for infectious, non-infectious and parasitic diseases of animals; - demonstrate knowledge in general preventive measures for the protection of animal health; - observe the physiological features of the sexual apparatus of females and males, the time and frequency of insemination, the course of pregnancy, childbirth and the postpartum period, the causes of infertility, the technology of artificial insemination and embryo transplantation.
CC 13	**Module 7. Animal Science** They contribute to the development of breeding and breeding methods, the development of technological methods of rational nutrition of farm animals and poultry.	-possess knowledge in the field of breeding and breeding of farm animals and poultry, ensuring an increase in their productivity, - to know the origin of farm animals, the economic and biological characteristics of different breeds of animals; productivity and methods of their assessment; modern production technologies and the importance of industries in the system of the agro-industrial complex. -possess breeding methods, techniques for exterior and interior evaluation of animals; make a plan for the selection and selection of the herd, the genealogical structure of the herd; determine the breed of crossbreeds; technology for the production of livestock products. - to develop rations for animals and poultry depending on the climatic zones of the country and the technology of animal exploitation. -use the knowledge to assess the quality of feed and improve the feed base. ––be able to logically and consistently justify the adoption of technological decisions based on the knowledge gained; use methods of general and private zootechnics
CC 14	***Module 8. Innovations in animal husbandry*** Demonstrate knowledge in the field of biotechnology, genomic breeding, apply innovations and elements of digitalization in animal husbandry	-possess the skills of biotechnological production of animal food products and carry out embryoengineering manipulations; -to use knowledge of the basics of genetic transformation of somatic and germ cells of animals and to use animal cell cultures for scientific and practical purposes -apply innovative technologies and modern digitalization programs in the professional sphere. - formulation of arguments in carrying out scientific research on the production of livestock products and solving issues of increasing the productivity of farm animals.
	Professional competencies	**Learning outcomes**
CC 15	**Module 9. Large-scale animal husbandry** To prepare highly specialized specialists with knowledge on feeding, keeping and breeding of cattle, horses and camels	-to know the main directions of the industry, breeds, exterior and constitutional features and types of horses, camels and cattle, the structure of breeds, the main signs and indicators of productivity -apply methods of breeding and breeding breeding, technology of rearing young animals in horse breeding, camel breeding and cattle breeding, modern technology of

		rearing herd horses, tethered and untethered keeping of cattle, advanced experience of domestic and foreign technology of production of horse breeding, camel breeding and cattle breeding -develop breed standards depending on the direction of productivity, issues of formation, accounting for product sales.
CC 16	**Module 10. Small animal husbandry** They are able to solve professional tasks in the production activities of small livestock	-describe the main directions of the sheep breeding industry, goat breeding, pig breeding and poultry farming, breeds, species and their zoning, exterior and constitutional features, breeding characteristics and productivity indicators -to develop methods of breeding and breeding work, the technology of raising young animals, to develop and implement a rational technology for the production of high-quality products, the production of eggs and poultry meat, to calculate the number of chickens of the parent flock in the production of eggs and poultry meat. - possess the skills of sheep shearing technology, wool classification, downing, rules for removing sheepskins, goats and canning methods, organization of lambing, goat breeding and insemination of sheep and goats, processing eggs into egg powder, as well as poultry meat processing technology.

6. Summary table, reflecting the amount of credits mastered by the modules of the educational program:
Number of modules-10

Course of Study	Semester	The number of studied disciplines			Number of academic credits						Total academic for hours	Additional types of training (DVO) military training	Amount	
		CC	UC	OC	Theoretical training	Training practice	Manufacturing practice	Undergraduate practice	Total certification	Total			Exam	Diff. offset
I	1	5	1	-	30					30	900		6	
	2	3	3	-	28	2				30	900		5	1
II	3	3	3	1	32					32	960		7	
	4	1	4	-	23		5			28	840		5	1
III	5	-	4	2	31					31	930		6	
	6	-	3	2	26		5			31	930		5	1
IV	7	-	4	1	30					30	900		5	
	8	-	2	1	17			5	8	30	900		3	1
Total		**12**	**24**	**7**	**215**	**2**	**10**	**5**	**8**	**242**	**7260**		**42**	**4**

Annex 2

Information about disciplines

№	Name of the discipline	Brief course description (30-50 words)	Number of credits	Formed competencies (codes)
Cycle of general education disciplines University component / Optional component				
1	History of Kazakhstan	The course is aimed at forming students' concept of the modern history of the Fatherland, based on a holistic and objective coverage of the problems of the ethnogenesis of the Kazakh people, the evolution of forms of statehood and civilization on the territory of the Great Steppe and the totality of the most significant historical facts and events. Systematization of historical knowledge about the main events of modern history, forming a scientific worldview and civic position.	5	KK 1
2	Philosophy	The course is aimed at forming students' understanding of philosophy as a special form of cognition of the world, its main sections, problems and methods, as well as skills of introspection and moral self-regulation, the development of research abilities and the formation of intellectual and creative potential. Special attention is paid to the problems of preserving national identity, assimilation of such key ideological concepts as justice, dignity and freedom.	5	KK 1
3	Foreign language	Teaching a foreign language sets tasks for the development of foreign language communicative competence in the totality of its components: speech competence – the development of communicative skills in four main types of speech activity; language competence – mastering new language means (phonetic, spelling, lexical, grammatical; socio-cultural competence - the formation of the ability to represent your country, its culture.	10	KK 1
4	Kazakh (Russian) language	The discipline is designed to develop the linguistic personality of the student, who is able to carry out cognitive and communicative activities in Russian in the areas of interpersonal, social, professional, and intercultural communication in the context of the implementation of state programs of trilingualism and spiritual modernization of national consciousness. The discipline assumes successful mastery of the types of speech activity in accordance with the level of training.	10	KK 1

5	Information and communication technology	The discipline is aimed at developing the ability to critically evaluate and analyze processes, methods of searching, storing and processing information, ways of collecting and transmitting information through digital technologies. As a result of the training, students are expected to master the conceptual foundations of the architecture of computer systems, operating systems and networks, the formation of knowledge about the concepts of developing network and web applications, information security tools.	5	KK 2
6	**The module of socio-political knowledge (sociology, political science, cultural studies, psychology)**			
	Sociology	The discipline studies society, revealing the internal mechanisms of its structure and the development of its structures (structural elements: social communities, institutions, organizations and groups); patterns of social actions and mass behavior of people, as well as the relationship between the individual and society sociology explains social phenomena, collects and summarizes information about them.	**2**	KK 1
	Political science	The purpose of mastering the discipline is to explain to future specialists the socio-political processes and the formation of political culture. To promote students' assimilation of political, legal, moral, ethical and socio-cultural norms necessary to serve the interests of society, form personal responsibility and achieve personal success.		KK 1
	Culturology	studies on culture, its history, essence, patterns of functioning and development, which can be found in the works of scientists representing various options for understanding the phenomenon of culture. In addition, cultural studies are engaged in studying the system of cultural institutions, through which the upbringing and education of a person are carried out and which produce, store and transmit cultural information.		KK 1
	Psychology	Psychology is a science whose purpose is to study the mechanisms of functioning of the human psyche. It examines the patterns of people's behavior in various situations, thoughts, feelings and experiences that arise during this process. Psychology is what helps us to know ourselves more deeply, to understand our problems and their causes, to realize our shortcomings and strengths. Its study		KK 1

		contributes to the development of moral qualities and morality in a person.		
7	Law and anti-corruption culture	The purpose of the discipline is the education of Kazakhstani patriotism as a necessary condition for the improvement of legal statehood in the Republic of Kazakhstan, the formation of students' world knowledge, the improvement of public, legal culture and private legal knowledge. Improving legal literacy within the framework of anti-corruption legislation and the formation of anti-corruption views of students, standards of behavior, negative attitude to any manifestations of corruption.	5	KK 1
	Economics	The content of the "Economics" course is aimed at mastering the basic knowledge of the economic life of the society, in which the economic activities of individuals, different enterprises and the state are carried out. The course contributes to the development of economic thinking among students and the ability to make rational decisions with limited natural resources. This discipline contributes to the formation of readiness to use the acquired knowledge about the functioning of the economy to guide the choice of profession and further education.	5	KK 1
	Ecology	Discipline studies the history of ecology as a science and familiarizes with the population and its structure in ecology, organisms and the conditions of their existence. The methods of studying the ecosystem, the cycle of substances and energy in ecosystems, as well as the concept of sustainable development are being mastered. It forms resource-saving skills and knowledge in the field of life cycles and interaction of biological species.	5	KK 3
	Life safety	Defines the actions of management and employees at economic facilities aimed at preserving peoples lives and ensuring the stability of the facility in the event of threats and emergencies of a natural, man-made, environmental and conflict nature. Studies the possibilities of prevention, prevention and liquidation of emergency situations.		KK 1
	Entrepreneurship	The discipline «Entrepreneurship» is aimed at training and developing the right competencies that will be useful in the life of any entrepreneur, forming an idea of the correct creation of a team for your	5	KK 2

		project, choosing and developing a business idea taking into account the needs of the market. The discipline promotes the development of entrepreneurial skills, the development of a business model, the preparation of a business plan, the opening and development of their own business, cooperation with public and private structures.		
	Fundamentals of Scientific Research	The course program is aimed at forming students' ideas about the methodology of scientific research, about setting up and conducting experimental experiments in a farm and laboratory, about analyzing the results of research; working with primary journals; acquiring the skills of writing a scientific article, abstracts, thesis, making a report in public and defending a thesis.	5	KK 2
	Basics of financial literacy	Personal finance management. Formation of own funds and choice of bank, Financial risks and investment strategies, Types of taxes paid by individuals in the Republic of Kazakhstan, Insurance market of the Republic of Kazakhstan, Creation of own business, Financial fraud, Pension savings opportunities.	5	KK 2
8	Physical education	Discipline covers a range of issues related to physical culture, as part of human culture, healthy lifestyle, its main components, socio-biological basis of human adaptation to physical and mental activity, preparation for independent physical culture and sports, age physiology, self-control physical condition, psychophysical basis of physical culture and sports, hygiene.	8	KK 1
The cycle of basic disciplines University component				
Module 1. Development and management in animal husbandry				
9	Physics with the basics of biophysics	"Physics with the basics of biophysics" will allow students to gain knowledge of fundamental physical laws aimed at understanding the physical foundations of biological laws and regularities and their application in veterinary medicine, biotechnology, agronomy and ecology. Form ideas, concepts and knowledge about the basic regularities of classical and modern physics and biophysics and give skills in applying them in professional activities, as well as for physical methods of measurement and research.	5	KK 1
	Computer Science	The purpose of this discipline is to prepare students in the field of using modern computer technologies for data	5	KK 1

		analyzing and visualizing in solving problems in the AIC, acquiring practical skills and experience in programming in the modern Python language for the purpose of effectively managing information resources in their chosen field of activity.		
	Biology of individual development	The course "Biology of individual development" forms knowledge and skills in the field of developmental biology, which allow students to assimilate the successive morphological changes of the embryo organism at the early stages of ontogenesis, the basic laws of ontogenesis. Students study the nature of the influence of environmental factors on individual development, stages and features of gametogenesis, sexual cycles and their hormonal control, artificial insemination and its use in practical breeding.	5	KK 1
		The mathematics course is the foundation of mathematical education and includes sections: linear and vector algebra, analytical geometry, mathematical analysis, differential equations, probability theory and mathematical statistics. Mastering the theoretical foundations of mathematics and acquiring practical skills in solving practical problems is a necessity for the subsequent study of basic and profile disciplines and the application of mathematical methods.	5	KK 1
Module 2 – Life Science				
13	Botany with the basics of feed production	Botany is a complex of disciplines that study the life of plants and fungi in all its manifestations: from subcellular units to the biosphere, concerning the theoretical aspects of biology, its applied directions and full–fledged biological education. A student who has completed the course masters the basic concepts in the field of biodiversity of the plant world, methods of observing botanical objects, methods of description and identification, as well as technologies for harvesting and storing feed.	6	KK 8 (PO 5)
14	Biochemistry	The discipline "Biochemistry" is intended for the formation of basic knowledge of the student, knowledge about the structure and chemical properties of the molecules that make up a living organism, the patterns of metabolic processes in it, as well as various mechanisms of regulation and features of	5	KK 8 (PO 3)

		animal life, the formation of a theoretical basis for the subsequent study of special disciplines.		
15	Zoology	The discipline studies the internal and external structure of animals, their species diversity, distribution, development, origin, relationship with the environment, importance in nature, environmental protection problems, and also forms an evolutionary worldview. As a result of the training, students form ideas about the diversity of vertebrate animals, the diversity of biological objects; about the main directions and patterns of evolution based on animal material; the role of animals in nature and in human life as an integral part of knowledge of the basics of rational nature management.	5	KK 8 (PO 3)
16		The course studies the anatomical structure and histostructures of the cells of the body, taking into account the characteristics of different types of farm animals, the structural arrangement of the systems of organs and tissues of the animal body, the transformation of the body and organs depending on changes in their functions and conditions of existence in the process of individual growth and development. The discipline forms students" fundamental and professional knowledge about the structure, physiological processes and functions in the body of farm animals.	5	KK 8 (PO 3)
		The course studies the structural arrangement of organ systems and tissues of the animal body, the transformation of the body and organs depending on changes in their functions and conditions of existence in the process of individual growth and development. The discipline forms students' fundamental and professional knowledge about the structure, physiological processes and functions in the body of farm animals.	5	KK 8 (PO 3)
Module 3– Managing genetic resources				
17	Biometrics	The discipline forms the basis of students' practical knowledge and skills in the field of biometrics and its interrelation with other sciences, i.e. the mastering of elementary methods of modern biometrics by a specialist. The course promotes the student's ability to analyze and process primary data on quantitative and qualitative characteristics using modern biometric	5	KK 9 (PO 7)

		methods and information technologies. Promotes mastery of the main characteristics of the studied signs of variability, types of distribution, parameters of the general population, chi-square criterion, analysis of variance, types of relationships between the signs.		
18	Animal genetics	The discipline studies the laws of heredity, inheritance of variability of traits; the manifestation of heredity and variability at different levels of the organization of a living organism; forms the basis of students' practical knowledge and skills in the field of genetics. According to the results of the course, the student masters the genetic elements of the cell, the types of heredity of traits, the nature of genetic material, the structure of the genome of pro and eukaryotes, the function of the gene and the ways of its regulation, the main stages of genetic engineering, types of mutational variability, the meaning of genetic polymorphism and evolutionary factors.	5	KK 9 (PO 7)
Module 4– The science of animal health protection and automation in animal husbandry				
19	Zoogiena	The discipline studies the influence of a complex of environmental factors on the natural resistance of the organism and the productive qualities of farm animals. As a result of the training, students have knowledge and requirements of zoohygienic environmental conditions and patterns, their impact on the animal's body, health, productivity; and are also able to develop zoohygienic norms and rules, optimal and maximum permissible environmental parameters for keeping productive animals.	5	KK 10 (PO 4)
20	Mechanization and automation of livestock	The course studies the mechanization and automation of processes in animal husbandry, feeding, maintenance, irrigation, water supply of livestock pastures, etc. The discipline forms students' knowledge and skills on the installation of automatic watering machines for watering animals and birds; the operation of equipment for grinding, mixing, preparation and distribution of feed. Promotes the ability to work with the equipment of a feed mill, machine milking of cows, as well as with machines and apparatuses for primary milk processing, sheep shearing and manure removal.	5	KK 10 (PO 4)
Module 5- Quality of livestock products				
21	Standardization and	The course is aimed at forming students'	5	KK 10 (PO

	certification of livestock products	understanding of standardization and certification of livestock products, legislative and regulatory framework, basic concepts, essence, objects, types, methods of standardization and conformity assessment of products. The discipline promotes in-depth study of standards for products, quality systems, services and personnel, international organizations of standardization and certification; obtaining skills in organizing standardization and certification activities in the Republic of Kazakhstan.		4)
22	Expertise and technology of primary processing of animal raw materials	In this course, students study the concepts of harvesting animal raw materials, classification, structure of wool, leather, fur and fur raw materials; master objective methods of assessing commodity properties and examination of animal raw materials in accordance with the NTD and GOST standards; technology of primary processing of animal raw materials. Methods of canning, as well as storage conditions of animal raw materials before delivery to processing enterprises.	6	KK 10 (PO 4)
	Export and import of breeding animals and animal products	The course studies domestic and international rules and standards, technological processes, ways and means of exporting and importing breeding animals, raw materials and products of animal origin. As a result of the training, students are familiar with veterinary and sanitary requirements for slaughter animals; rules for transporting animals by air, water and rail; veterinary and sanitary control criteria for unloading and delivery-acceptance of animals to the destination.	6	KK 10 (PO 4)
Module 6 – Animal welfare				
23	Basics of Veterinary Medicine	The discipline "Fundamentals of Veterinary Medicine" forms students with the necessary complex of knowledge on general pathology, clinical diagnostics, surgery, therapy of internal diseases, pharmacology, toxicology, epizootology, parasitology. As a result of the course, they acquire skills in organizing basic measures to combat infectious and non-infectious diseases of farm animals and protect people from diseases common to humans and animals.	5	KK 12 (PO 4)
	Microbiology	The discipline to help students learn the basics of general microbiology, morphology, physiology, microbial	5	KK 12 (PO 3)

		genetics. Influence of various factors on the microbial cell, participation of microorganisms in the transformation of compounds N, C, P, S, Fe and other elements. Study of various groups of saprophytic and pathogenic microorganisms and pathogens, microbes against crop diseases.		
24	Veterinary Reproductology	The discipline "Veterinary reproductology" studies the current state and prospects of veterinary reproductology, the physiology of the reproductive apparatus of females and males of farm animals, the physiology and pathology of pregnancy, childbirth, postpartum period of breast disease and their prevention of females of various animal species. Promotes the acquisition of knowledge about the physiological and pathological processes occurring in the body and reproductive organs of animals during insemination, fertilization, pregnancy, childbirth and the postpartum period.	5	KK 12 (PO 4)
	Veterinary Obstetrics	The course reveals the basic biological laws of reproduction, insemination of animals, physiology and pathology of reproductive organs and breast. The course is aimed at the formation of key competencies necessary for the effective solution of professional tasks and the organization of professional activity based on a deep understanding of the laws of reproductive function of farm animals, as well as prevention and therapy of obstetric and gynecological diseases and infertility of animals using modern methods of instrumental (ultrasound) and laboratory diagnostics.	5	KK 12 (PO 4)
Module 7 – Animal Science				
25	Feeding of farm animals	The discipline "Feeding farm animals" forms the theoretical and practical knowledge of students in the field of animal feeding. And also, the student can conduct a zootechnical analysis of feed and evaluate their quality and nutrition; determine the needs of animals in basic nutrients, analyze and make feeding rations. Based on the results of studying the course "Feeding farm animals", the student can monitor the quality of water; conduct a sanitary and hygienic assessment of the conditions of keeping,	10	KK 12 (PO 4)

		feeding and caring for animals; assess the state of the environment and individual indicators of the microclimate can determine.		
26	Breeding and selection of farm animals	The course is aimed at forming students' ideas about the qualitative improvement of existing and the creation of new, productive and economically profitable breeds and typical animals. And also, the course studies the productive, constitutional qualities of animals and methods of obtaining the best animals in new generations, compared with previous ones. The course studies the principles and methods of improving the quality of animals, taking into account their biological characteristics, feeding conditions and maintenance. As a result of the training, students acquire knowledge on the evolution and individual development of farm animals, the theoretical foundations of breed formation and organization of breeding work in conditions of intensification of animal husbandry, methods of selection, selection and breeding of farm animals.	10	KK 12 (PO 3)
27	Organization of agribusiness	The study of individual types of business, as well as the study of planning and production of agricultural products, market exchange of goods, the organization of financial management, methods of commercial agreements, business negotiations, consideration of the economic efficiency of entrepreneurial activity in general.	6	KK 12 (PO 4)
	Agricultural economy	The course examines the objective prerequisites for the formation and development of the agricultural sector of the economy, as well as the economic mechanisms of agribusiness at the macro, meso and micro levels, the organization and use of various resources of the agricultural sector in the production of competitive agricultural products.	6	KK 12 (PO 4)
Cycle of profile disciplines				
Module 8 – Innovations in animal husbandry				
28	Animal Biotechnology	The discipline studies modern methods of biotechnology and genetic engineering in order to accelerate the reproduction of valuable genotypes of farm animals, including the production of clonal, transgenic, homozygous and chimeric animals, embryo transplantation, as well as	5	KK 14 (PO 4; 6)

		cryopreservation technology of gametes and embryos of farm animals. As a result of studying the course, students acquire practical skills in selecting valuable animal genotypes, superovulation, donor synchronization, artificial insemination of queens.		
	Cellular biotechnology	The course forms the competence of students in the field of animal and plant biotechnology. This course outlines traditional and the latest technologies that are based on the achievements of genetic and cellular biotechnology of living organisms. Such methods of biotechnology as the production of recombinant DNA, transgenic animals and plants are considered. The issues of using biotechnological processes in solving environmental, agricultural, and raw materials problems are considered.	5	KK 14 (PO 4)
29	Digitalization in animal husbandry	Dissilina studies innovative directions of automatic regulation and control of technological processes in animal husbandry, taking into account the physiological features of the functioning of different types of animals, their specialization, requirements for the conditions of keeping and feeding, the products obtained. As a result of studying the discipline, students acquire knowledge and skills on the use of digital technologies for performing technological processes for obtaining livestock products; organization and control of feeding farm animals using digital technologies; application of digital technologies in agriculture.	**5**	KK 14 (PO 8)
	Organization of breeding work in animal husbandry	Formation of students' theoretical knowledge about methods of breeding, accounting and reporting in breeding work and evaluation of farm animals, evaluation of producers by the quality of their offspring, allocation of related groups, as well as accumulation of the breeding core, increasing productivity by analyzing the results of pair selection and breeding.	**5**	KK 14 (PO 8)
Module 9 – Large-scale animal husbandry				
30	Cattle breeding	This course studies cattle breeds, biological features and economically useful signs, constitution, exterior, interior of cattle, dairy and meat productivity, milk and beef production technology, herd reproduction and breeding. As a result of the training, students gain in-depth knowledge about	6	KK 15 (PO 6;7)

		the state of cattle breeding in our country and abroad, rational cultivation and use of cattle, intensive technologies for the production of milk and beef with the least labor costs.		
31	Horse breeding	Formation of students' theoretical knowledge about methods of breeding, accounting and reporting in breeding work and evaluation of farm animals, evaluation of producers by the quality of their offspring, allocation of related groups, as well as accumulation of the breeding core, increasing productivity by analyzing the results of pair selection and breeding.	6	KK 15 (PO 6;7)
32	Camel breeding	The course examines the origin, domestication and transformation of camels, their exterior, constitutional and biological features, breeds and principles of their classification. As a result of the training, students gain in-depth knowledge on reproduction and technology of rearing young animals, methods of accounting for dairy productivity of camels, technology of dairy production, as well as the current state of camel breeding in the Republic of Kazakhstan and abroad.	6	KK 15 (PO 6;7)
Module 10 – Small-scale animal husbandry				
33	Sheep and goat farming	The discipline "Sheep and goat breeding" forms students' theoretical and practical knowledge on the technology of production of sheep and goat products based on the achievements of modern zootechnical science and best practices. As a result of the training, students acquire skills in obtaining products and primary processing (shearing and classifying wool, down, fattening and feeding, milking sheep and goats, milk processing, etc.), organizing the maintenance and feeding of sheep and goats.	6	KK 16 (PO 6;7)
34	Pig farming	The discipline studies the issues of evolution and the process of breed formation, the creation of new and improvement of existing breeds, increasing the productivity of pigs, conducting breeding work in pig breeding, organization and techniques of herd reproduction, rearing and fattening of young pork production technology. As a result of studying the discipline, students acquire theoretical knowledge and practical skills and abilities on methods of increasing the fattening and	6	KK 16 (PO 6;7)

		meat productivity of pigs, the efficiency of feed use, and the intensification of pork production. the most important issues of pig production technology.		
35	Poultry farming	The discipline studies the biological, productive and economic features of all types of poultry, based on breeding, breeding, feeding and maintenance, poultry production technology. As a result of mastering the course, students acquire knowledge and skills in various methods, methods and methods of breeding, feeding and keeping poultry; apply different technologies for the production of eggs and poultry meat; possess special skills of production control of technological process parameters and product quality.	**6**	KK 16 (PO 6;7)

Annex 2

Base practice

№	Name of companies, enterprises, organizations	Contacts, E-mail
1	Amankeldi LLP South Kazakhstan region, Kazygurt district, Kazygurt village, Kunayev str., 8	87252531551, Почта: nuraman_agro@mail.ru
2	KH " MM " Zhambyl region, Zhualy district, Kurkureu village, Janis street 12.	Тел: 87770924948
3	MKS Akboz LLP Almaty region, Panfilov district, Zharkent, 149 Tanybayev street.	7283190113; 7283179032
4	KH "Shyntas" Zhambyl region, Kordai district, s / o Aukatty Sarbulak plot.	8(702)6662421
5	"Almaty hippodromes" Almaty, Ryskulova str., 57 B.	87017440096
6	KH "Bokes" Almaty region, Alakol district. Ucharal, ul. Dulepova 13 house.	87015586926
7	KH "Bakey" East Kazakhstan region, Urdzhar district, Makanshi village, Naimanbayev str., 154 B.	87233941442; 87017789911. Почта:Bakei_agro@mail.ru
8	Sergaziev LLP WKO, Zhanakalinsky district, Chapaeva village, Abaya str., 1.	87774763289
9	LLP zko" Koshim", Zhanakalinsky District, P. Chapaeva STR. Friendship, 20.	87014228607
10	KH "Kungey" Almaty region, Balkhash district, Mialy village, Tasmurun str., 4.	87051926699
11	SHK "Nusupbekov" Almaty region, Ili district, Karoy tract, Brigade No.2.	87013870053
12	Shanyrak LLP, Almaty region, Koksu district.	87283825322; 87014142931
13	KH "Murager-D" Almaty region, Aksu district, Kapal village.	87014363788
14	KH "Sarsebek" Almaty region, Talgar district, Shevchenko street 13.	
15	SHK "Altai Karpyk Saidala Sary Toka" Pavlodar region, Irtysh district.	87779355556; 87183226381
16	PC "Izhevsk", Akmola region, Arshali district, Izhevsk village.	87172328553; 87164424210
17	ZHSHS "Pobeda" Pavlodar region, Shcherbakty district. S. Oralovka, ul. 1 May, 33.	87183629740. Почта: too_pobeda@mail.ru
18	ZHSHS "Ak sunkar" Almaty region, Zhanakalinsky district, Kazybek bek st., Karbozin str. 2.	87273892786
19	KH "Sholak Espe" Karaganda region, Shetsky district, village of Kyzyl Tau.	87781772000
20	SHZHK "Aiteke Bi-SK" North-Kazakhstan region, Mamlyutsky district, Kalugino village.	87152317225. Почта: peterfeld-agro@mail.ru
21	KH "Yeshmuratov E" Almaty region, Alakol district, Kabanbay auyly, 22 Konaev str., house.	87028485337. Почта: ermek.ashmuratov.68@mail.ru
22	KH "Kumtekey" Almaty region, Raiymbek district, Kegen village, Almereka str., 10.	87025293470
23	SHK "Almas" Almaty region, Aksu district, Kapal village, Akyn-Sara str., 68 house.	87074790978
24	ZHSHS "Biyazy" South Kazakhstan region, Kazygurt district, p. Kyzylkiya, Ashirbayeva str.	87024298838
25	Kazybek Bek LLP Almaty region, Zhanakalinsky district, Kazybek Bek St., 28 Energetikov str.	87273892786.

26	Kazykurt Agroservice & K LLP, SKR, Kazygurt district, p. Kyzylkiya, Nusenova str. 21.	87017090000
27	AitekeBI-Sk LLP, North Kazakhstan region, Mamlyutsky district, Kalugino village.	87152317225. Почта: peterfeld-agro@mail.ru
28	SHK "Aidarbayev E. S." Almaty region, Enbekshikazakh district, Saimasai village, Studentskaya str., 1 house.	87273867919; 87273913191 Почта: Rh_saimasai@mail.ru
29	LLP "Agrofirma Dinara Ranch" in Almaty region, Balkhash district, S. Mialy, St. Malay Sary, 2.	
30	AK "Zhenis" Karaganda region, Zhanaarka district, S. Tugusken street S. Zhumabekova 10.	87056680065
31	JSC "Kyrti Sayakhat" Almaty region, Zhanakalinsk district, St. Kazybek Bek, St. Carmosina 2. Tel:	87273892786.
32	PC " o. Kurbanov "Turkestan region, Sairam district, Mankent village, O. Kurbanalieva street, No. 28 B.	87782980273
33	KH "Madi" Almaty region, Zhanakalinsky district, Akterek village,Koyandy street house b /n	87029448899 Почта: akterek@mail.ru
34	Kalyk-Trans-1 LLP»	
35	"Plemzavod Almaty" ASHOK Almaty region, Talgar district, Talgar, Kunayev str. 66.	87277477600; 2956290, 3049105 Почта: mtm.2018@mail.ru
36	KH "Azhar" Almaty region, Zhanakalinsky district, Uzynagash village, Duysenbayev str.30.	87015454883
37	"Otes-Bios-Asia" Almaty region, Balkhash district, Bakanas village, Baishinova str., 1.	87272642629 Почта: kaznaupractica@mail.ru
38	"Mereke" AZ Akzhambyl region, Merkinsky district, Akerman village, Tole bi str., 31	87263226446, 87765886955 Почта: toleu68@mail.ru
39	"Ruslan" Ekalmatinskaya region, Zhanakalinsky District, P. Aksengir	
40	KH "smobyk" Mangistauskaya region, Mangistauskaya district, Kizan village, ul. Kyzan 10, KV 1	87293142021, 87784915050 Почта: bmyrbaev01@mail.ru
41	"Taushyk auyl sharuashylygy" ZHSHS Mangystau region, Taupkaragan district. Taushyk village, Ardager street	87019122826
42	"Bolashak Nur" OK SK, Tolebisky district, Pervomaevka village, D. Konaev str., 193 "A".	87053460544 Почта: mirazizmirsidikov57@vail.ru
43	"Aigerim" SHK Almaty region, Panfilov district	87283152449, 87028889889
44	"RZA-Asyltulik" ZHSHS Kyzylorda region, Kazalinsky district, Aiteke bi village, G. Muratbayev str., 1E	87243824423
45	"Turlykulov Zh. M" ZHSHS Zhambyl region, T. Ryskulov district, S. Teren ozek	87262513773, 870147981174 Почта: Lagy.magrifa@mail.ru
46	"Ahay" SHK Dzhambul region, Talas district, Abay street No. 2.	8(702)8943731 Почта: kh.akhai7@mail.ru
47	"Ashirbek" SHK Zhambyl region, Baizak district, Kokozek village, house 15,	87057972612, 87077972612
48	"Yntymak" SHK Almaty region, Zhambyl district "Bekishev E. T" SHK Almaty region, Sarkand district, Almaly village,	87077356576
49	"Zhaskanat" SHK Aklmatinskaya region, Sargandinsky district, Abay, Doszhanova str., 9a house,	87753188584
50	"Kara bala" SHK YUKO. Ordabasinsky district, Bogen-Auyl village, Auezova str. 6,	87014202020

51	"Zhandos" Almaty region, Raiymbek district, Narynkol village, T. Ryskulov str., 60.	872779211673
52	"Parpata" ZHSHS SKR, Ary district, Kozhatogay village,	87473144144
53	"Alel Agro" AK Almaty region, Enbekshikazakh district, village of Baiterek, uch. Kvaltar 081 page,	8-727-225-43-46, 8-727-225-43-60
54	" Zhumabay»SHK Almaty region, Zhambyl district, Besmoinak village,	87476049668
55	KH "R-Kurti" Almaty region, Zhambyl district, Kazybek-bek village, Sholpankulov str., 7.	87277034016,87277034032.Почта R.Kurti@mail.ru
56	"Bokanchinov" SHK Almaty region, Enbekshikazakh district, Rakhat rural district, Kainazar village, Druzhba str., b / n,	87013883321
57	"Sharua" SHK Aktyunisky region, Aktobe, Blagodar Rural district, Belogorka village,	87132241892, 87058396797
58	"Batai Shu" SHK	
59	"Makhanov Utemis" SHK Almaty region, Ili district, Akshi village, ul.Gendosova3 / 2,	87057605063
60	Farm "Erik" Almaty region, Zhambyl district, village.Bozoy, Levober 4,	87778030201
61	Fund for the preservation of the National Dog Breed" living legend " Almaty, MKR.Aksai-1, House 13, kv32,	87057155666

ҚАЗАҚ ҰЛТТЫҚ АГРАРЛЫҚ ЗЕРТТЕУ УНИВЕРСИТЕТІ
Коммерциялық емес акционерлік қоғамы

«Зооинженерия және тағам өндірісінің технологиясы» факультеті

«Зооинженерия» кафедрасы

16.01.2024ж Алматы қаласы

Хаттама №6
көшірмесі

ҚАТЫСҚАНДАР: кафедра меңгерушісі, профессор Ш.Адылканова., академик: Т.Садықұлов., профессор: Ш. Альпейсов, қауым. профессорлар: Б.Құлатаев., Л.Бөпебаева., Е.Баймәжі., Р.Қадыкен., Г. Жумагалиева аға оқытушы: З. Нургазина.

Білім алушылар: Жукина А., Жукина А., Жураев Ш., Тажигулов Д., Рушанова З.

Бітіріп кеткендер: Исаев А., Шатаева., Н. Тұралық., А. Ықылас., Ш. Гафуров.

Жұмыс берушілер: «Айдарбаев» ШҚ Басшысы Е.Айдарбаев

КҮН ТӘРТІБІ

1. 6В08201«Мал шаруашылығы өнімдерін өндіру технологиясы» білім беру бағдарламасы бойынша бакалавриат деңгейінің 2024-2028 жж арналған білім беру бағдарламасын талқылау.

ТЫҢДАЛДЫ:

«Зооинженерия» кафедрасының меңгерушісі, профессор Ш.Адылканова., кафедраның оқытушы-профессорлық құрамына 2024-2028 жж арналған жаңа білім беру бағдарламасы жасалытынын айтып, кафедраның осы қарастырылып отырған БББ комитетчигі Е.Баймәжіге осы жайлы ақпарат беруін және соған байланысты оқытушыларға өз пікірлерін білдірулерін сұрады.

Комитетчик Е.Баймәжі - сөз алып, 6В08201 «Мал шаруашылығы өнімдерін өндіру технологиясы» білім беру бағдарламасының бакалавр бойынша жалпы пәндердің кредит санын, соның ішінде міндетті пәндердің кредит санын, базалық пәндер кредитін, жоғарғы оқу орны компоненттерінің кредитін, базалық пәндердің ішіндегі таңдау компонентінің кредиттерін жеке-жеке атап көрсетті. Сонымен қатар, былтырғы 2023-2027 жж. арналған білім беру бағдарламасы «Атамекен» кәсіпкерлер коорпорациясының тәуелсіз сарапшылары тарапынан оның мазмұны мен қойылған арнайы талаптарына сай өте жоғары балл алды. Енді, биылғы жаңа 2024-2028 жж. арналған білім бағдарламасының құрылымына

жұмыс берушінің талаптарына және 2023-2027 жж. арналған білім беру бағдарламамызға «Атамекен» кәсіпкерлер коорпорациясының тәуелсіз сарапшылары тарапынан қойылған талаптарын орындау үшін, Сіздердің кәсіби біліктеріңізбен білімдеріңіздің көмектеріңіз зор болды. Нәтижесінде біздің бакалвр деңгейіне арналған білім беру бағдарламамыз мағыналы және әдістемеге сай болып шықты.

СӨЗ СӨЙЛЕГЕНДЕР: Кафедраның қауымдастырылған профессоры Л.Бупебаева: Білім беру бағдарламасының кей пәндерді түбегейлі алып тастап, кәзіргі заман талаптарына сай пәндерді енгізу керек. Мысалы «Мал шаруашылығындағы инновация» пәнін ББББ алыпт тастау керек. Себебі, бұл пәнді магистртура деңгейінде оқытылады.

«Айдарбаев» ШҚ Басшысы Е.Айдарбаев – Кәсіби мамандарды даярлау үшін жасалынып отырған білім беру бағдарламаларын құрастыруды тек кафедраның оқытушы-проферсорлары құрамы ғана емес, сонымен қатар білім алушылар мен бұрын бітіріп кеткен түлектерді және мені де шақырып отырғандарыңызға үлкен рахмет. Ал енді ББББ құрылымына келетін болсақ, 4 –ші курстағы «Геномдық селекция» пәнін бере алатын кафедраның мүмкіншілігі бар ма? Ал егер жоқ болса ол пәнді ББББ алып тастау керек.

«Зооинженерия» кафедрасының оқытушы-профессор құрамы мен білім алушылар және жұмыс беруші тарап та аталған бакалавр деңгейінің білім беру бағдарламасын бір ауыздап құптап, ал кейбір қателіктерді түзету керек екендігін атап өтті.

ШЕШІМ ҚАБЫЛДАНДЫ: Бірауыздан бәрі мақұлдады.

Төраға Ш.Адылканова

Хатшы З. Нургазина

Зооинженерия және тағам өндірісінің технологиясы факультетінің
академиялық комитеті мәжілісінің

№4 ХАТТАМАСЫНАН КӨШІРМЕСІ

Төрайым – К.Искакова
Хатшы – Ж.Искакова

Алматы қ. «30» қаңтар 2024 ж.

ҚАТЫСҚАНДАР: 11

КҮН ТӘРТІБІ

1. ҚазҰАЗУ-нің «Зооинженерия және тағам өндірісінің» технологиясы факультетіне қарасты «Мал шаруашылығы өнімдерін өндіру технологиясы» кафедасының 2024-2028 оқу жылға арналған білім беру бағдарламалары туралы

ТЫҢДАЛДЫ: Зооинженерия және тағам өндірісінің технологиясы факультетінің академиялық комитет Төрайымы Искакова Қоңырша «Зооинженерия» кафедрадасында бакалавр, магистратура және доктор PhD деңгейлеріне сай білім беру бағдарламаларын талқылау бойынша университетіміздің және басқада жұмыс берушілер сияқты білікті мамандардың бұл мәжіліске қатысып отырғанын атап өтті. Сөз барысында, 2024-2028 оқу жылына арналған білім беру бағдарламаларына өз пікірлеріңізбен ұсыныстарыңызды білдірсеңіздер деп аяқтады.

СӨЗ АЛҒАНДАР: «6В08201-Мал шаруашылығы өнімдерін өндіру технологиясы» Білім беру бағдарламасың комитетчигі Баймәжі Е. – биылғы жылғы талаптарға сай, біздің бағдарламамен 6В05102–«Биотехнология» бағдарламасының кейбір пәндері бірігіп отыр. Мысалы: бұғанға дейін «Жануарлар биотехнологиясы» мен «Генетика» пәндерін екі Білім беру бағдарламасының студенттері екі түрлі кредитте және түрлі семестрлерде оқитын еді, ал 2024-2025 оқу жылнан бастап бірігіп оқитын болды, ендиши олардың арасында (оқу семестрі мен кредит саны) ешқандай айырмашылықтар болмайды, яғни студенттер бірігіп оқиды. Соның ішінде кредит сандары мен оқу семестрлері біріктірілді, міне осындай жаңалықтар болуда.

СӨЗ АЛҒАНДАР: Мал шаруашылығы өнімдерін өндіру технологиясы» Білім беру бағдарламасың магистратура және доктор PhD деңгейлері бойынша жауапты комитетчик Қойшыбаев А. - магистратура және доктор PhD деңгейлері бойынша жалпы пәндердің кредит санын, соның ішінде міндетті пәндердің кредит санын, базалық пәндер кредитін, жоғарғы оқу орны компоненттерінің кредитін, базалық пәндердің ішіндегі таңдау компонентінің кредиттерін жеке-жеке атап көрсетті. Сонымен қатар, былтырғы 2023-2024 оқу жылына арналған білім беру бағдарламасы «Атамекен» кәсіпкерлер коорпорациясының тәуелсіз сарапшылары тарапынан оның мазмұны мен қойылған арнайы талаптарына сай өте жоғары балл алды. Ал, биылғы жаңа 2024-2028 оқу жылына арналған білім бағдарламасының құрылымына заман талабына сай өзгеріп жатыр, соның ішінде: №1 Ірі қара шаруашылығы және жылқы шаруашылығы өнімдерін өндіру технологиясы Білім беру траекториясыдағы 23 кредиттің орынына 11 кредит және №2 Қой шаруашылығы және құс шаруашылығы өнімдерін өндіру технологиясы траекториясыдағы 23 кредиттің орынына 11 кредит болып өзгеретін болды. Енді доктор PhD деңгейінің ББББ дәл былтырғыдай етіп қалдыруымыз керек деп ұсыныс қалдырды, дегенменде келесі жылда бұл ББББ құрылымын өзгертуге салармыз.

Құлатаев Б.: Бакалаврларға арналған білім беру бағдарламасы пәндерін оқып-үйрену кезінде түлектердің еңбек нарығында бәсекеге қабілеттілігін қалыптастыру үшін барлық жағдайлар жасалды, бұл білім беру бағдарламасы бойынша тезірек жұмысқа орналасуға мүмкіндік береді. Білім беру бағдарламасы қажетті базалық білімді қалыптастырып, магистратураға, PhD докторантураға түсуге қажетті білімді бере алатындығын атап өтті.

ҚАУЛЫ ЕТТІ: 2024-2028 оқу жылына арналған «Мал шаруашылығы өнімдерін өндіру технологиясы» кафедрадасынан білім беру бағдарламалары талапқа сай.

ДАУЫС БЕРІЛДІ: «Бірауыздан» мақұлданды.

Академиялық комитет төрайымы К.Искакова

Хаттаманы жүргізген Ж.Искакова

«6В08201-Мал шаруашылығы өнімдерін өндіру технологиясы» білім беру бағдарламасына

ПІКІР

«6В08201-Мал шаруашылығы өнімдерін өндіру технологиясы» білім беру бағдарламасы бойынша бакалаврларды даярлауды жүзеге асыруға арналған бұл білім беру бағдарламасының негізгі мақсаты - мал шаруашылығы өнімдерін өндірудің заманауи технологияларын меңгерген жоғары білікті кадрларды даярлау болып табылады. Аталған бұл білім беру бағдарламасы жоғары кәсіптік білім берудің тиісті бағыты бойынша мемлекеттік білім беру стандарты негізінде және еңбек нарығына қарай жұмыс беруші органдардың талаптарын ескере отырып әзірленген және бекітілген, сондай-ақ ұсынылған бағдарламаның мазмұны Қазақстан Республикасының заңнамасына сәйкес келеді, қазіргі заманғы білім беру сипаттамаларына жауап береді.

Білім беру бағдарламасын толық аяқтаған студент, жалпы 242 академиялық кредиттік пәндерді меңгеріп шығады, соның ішінде: жалпы білім беретін пәндер циклі – 56 кредит, базалық пәндер циклі -127 кредит, кәсіптік пәндер циклі – 51 кредит және қорытынды аттестация-8 кредитті құрайды. Сондай-ақ, білім беру бағдарламасында 10 жалпы және таңдау модульдері қарастырылған.

Бұл, «6В08201-Мал шаруашылығы өнімдерін өндіру технологиясы» білім беру бағдарламасының курсын толық аяқтаған студент, келесідей жұмыстарды жасауға қабілетті болады: - ауылшаруашылығы малдары мен құстарын селекциялық-асылдандыруда мал өсірудің заманауи әдістерін қолдана біледі; әртүрлі жеке меншіктік қосалқы шаруашылықтарда өсірілетін ауыл шаруашылығы малдарының өнімділік және тұқымдық сапасын арттыру, сондай-ақ өсімталдығы мен сапасын жоғарылату жөніндегі ғылыми негізделген нәтижелерді өндірісте пайдалана алады; ауыл шаруашылығы малдары мен құстарының асыл тұқымдық есебін жүргізу мен оларды қалыпты азықтандыруды пайдалана отырып, шаруашылық жағдайында ғылыми-зерттеу әдістерін пайдаланып эксперимент жүргізуге қабілетті болады.

Білім алушылар білім беру бағдарламасын толық игеру барысында, жалпы мәдени, кәсіптік құзыреттерді игере отырып, алған білімдері мен жеке қасиеттерін іс жүзінде қолдануға қабілетті болады.

Студенттердің білім беру бағдарламасына қарағанда, жалпы білім беру, базалық, бейіндік пәндерді игеру арқылы олардың шығармашылық әлеуеттін, бастамашылық және жаңашылдық қабілеттерін дамыту үшін барлық жағдайлар жасалған.

Білім алушылар, білім беру бағдарламасын игеру нәтижесінде жалпы мәдени және кәсіптік құзыреттіліктермен, яғни олардың кәсіптік қызмет міндеттерін шешу үшін білімін, іскерлігін, жеке қасиеттерін қолдану құзреттіліктеріне ие болады.

Қорытындылай келе, бұл білім беру бағдарламасы және элективті пәндердің каталогі ҚР жоғары білім берудің мемлекеттік жалпы білім беру стандартының негізгі талаптарына толық жауап береді, ендеше «6В08201-Мал шаруашылығы өнімдерін өндіру технологиясы» білім беру бағдарламасы бітірушілердің жалпы мәдени және кәсіби құзыреттіліктерін қалыптастыруға ықпал етеді деп санаймын.

«Айдарбаев» ШҚ Басшысы _____ Е.Айдарбаев

РЕЦЕНЗИЯ
на образовательную программу «6В08201- Технология производства продуктов животноводства»
кафедры «Зооинженерия» НАО КазНАИУ

Целью образовательной программы «6В08201- Технология производства продуктов животноводства» является подготовка высококвалифицированных кадров, обладающих современными технологическими процессами производства продукции животноводства.

Миссия образовательной программы заключается в создании необходимых условий для формирования конкурентоспособного специалиста, востребованного в агропромышленном комплексе и мировом научно-образовательном пространстве.

В образовательной деятельности:

- создание, применение и распространение знаний и технологий мирового уровня для повышения конкурентоспособности национальной экономики;

- развитие и совершенствование модели системы аграрного образования, обеспечивающей высокое качество подготовки всесторонне развитых, высококвалифицированных кадров.

Результаты освоения основной профессиональной образовательной программы определяются приобретаемыми обучающимися общекультурными, общепрофессиональными и профессиональными компетенциями, т.е. их способностями применять знания, умения и личностные качества для решения задач профессиональной деятельности.

При изучении общеобразовательных, базовых, профилирующих дисциплин для обучающихся созданы все условия для развития творческого потенциала, инициативы и новаторства, продолжения студентами образования на последующей ступени высшего профессионального образования.

Считаем, что рецензируемый образовательная программа, разработанный кафедрой «Зооинженерия» НАО «Казахский национальный аграрный исследовательский университет» отвечает основным требованиям государственного общеобразовательного стандарта после высшего образования РК и способствует формированию общекультурных и профессиональных компентенций по образовательной программе «6В08201-Технология производства продуктов животноводства».

Директор
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