Annotation of elective educational component
«Normalized feeding systems of animals»

Academic discipline	Normalized feeding systems of animals
Tutor	Kuzmenko Oksana Anatoliivna PhD agricultural sciences, associate professor, department of technology of feed, feed additives and feeding of animals
Courses and semesters, when the discipline is planning to study	1 course (master degree), 2 semester
Faculties whose students are invited to study discipline	Biological-technological faculty
List of competencies and learning-related outcomes that discipline provides	According to the requirements of the educational-professional program "Technology of production and processing of livestock products" applicants should acquire the ability to obtain the following competencies: GC 1 (general competence). Ability to abstract thinking, analysis and synthesis. GC 2. Skills in using information and communication technologies. PC 1 (professional competence). Ability to analyze and control the safety and quality of feed and feed products and animal nutrition. PC 10. The ability to clearly and unambiguously convey one's own knowledge, conclusions and arguments to specialists and non-specialists, in particular to people who are studying. The result of studying the discipline is the acquisition by students of the following knowledge and skills: - to evaluate and ensure the quality and safety of technologies for the production of livestock products, fodder and feed products, animal nutrition levels and products of animal origin (to know the physiological features of animals of modern breeds, types and crosses; to know the features of digestion and metabolism of energy, nutrients, minerals and biologically active substances in animals); - to apply modern mathematical methods, information technologies and specialized software for research and development in the field of technologies for the production and processing of livestock products (to know the technique of developing and improving systems of

complete feeding of animals to ensure high genetic potential; to be able to determine the need of animals for energy, nutrients, minerals and biologically active substances; to be able to develop recipes of compound feed, premixes, feed mixtures for the organization of complete feeding of animals);

- to search for the necessary data in scientific literature, databases and other sources, analyze and evaluate these data (to know the peculiarities of animal feeding depending on the technological features of the production of various types of animal husbandry products; be able to design rations and feeding systems for cattle, sheep, pigs, horses) ;

- to be responsible for the development of professional knowledge and practices, evaluation of the strategic development of the team, formation of an effective personnel policy (to know the peculiarities of conducting experiments on the feeding of farm animals; to be able to organize experiments on animal feeding; to be able to apply modern Ukrainian and foreign animal feeding systems and poultry for different production technologies of animal husbandry products).

Description of the discipline

Prerequisites needed for studying the discipline	The selective educational discipline "Normalized feeding systems of animals" is based on the knowledge of such disciplines as "Physiology of farm animals", "Animal feeding", "Production, storage and quality control of fodder and feed additives", "Biochemistry in animal husbandry", studied at the first level of higher education, and "Biology of farm animals", "Technology of fodder and nutrition of animals", studied in the first semester of master's studies in the specialty 204 Technology of production and processing of animal husbandry products.
Students' limit in a group	20 students
Topics of in-class activity	**Lectures** 1. Introduction about rationed animal feeding. 2. Rational feeding of high-performing animals. 3. Standardized feeding of cattle and methods of its improvement. 4. Evaluation of energy nutrition of feeds and rations in exchangeable energy. 5. Modern approaches to the regulation of animal protein nutrition.

	6. Rationing of carbohydrates and fats in feeding cattle. 7. The role of mineral nutrition for animals. 8. Vitamins and their significance for the animal body. 9. Modern fodder in animal feeding. Preservation of feed with biologically active additives. 10. Combined fodder in animal feeding. Additives of various origins in animal feeding. Premixes in animal feed. 11. Standardized feeding of cattle. Organization of modern standardized feeding of dairy cows. 12. Modern systems of standardized pig feeding. Organization of feeding of sows and young pigs for growing for meat according to modern norms. 13. Modern systems of rationed sheep feeding. 14. Modern systems of standardized horse feeding. 15. Modern poultry feeding systems. Organization of standardized feeding of chickens, ducks, geese, turkeys, etc. according to modern standards. 16. Modern systems of feeding rabbits and fur animals. **Practical classes** 1. Modern systems of standardized animal feeding. 2. Rational feeding of highly productive animals according to modern standards. 3. The concept of rationing of cow feeding in advanced countries of the world. 4. The latest system for assessing the nutritional value of feed by chemical composition and the amount of digestible nutrients. 5. Evaluation of the energy nutritional value of fodder according to modern systems. Estimation of the energy nutritional value of feed by the net energy of lactation. 6. Modern methods of evaluating protein, carbohydrate, lipid, mineral and vitamin nutrition of feed. 7. Content in feed of dry matter and structural and non-structural carbohydrates. The content of protein fractions in feed. The content of mineral substances and vitamins in fodder. 8. Modern systems of rationed feeding of cattle, pigs, sheep, horses, poultry, rabbits, and fur animals.
Language of teaching	Ukrainian