

Summary

Name of discipline	New research methods in animal feeding
Teacher	Serhii Babenko candidate of agricultural sciences (PhD) Associate Professor of the Department of technology of feed, feed additives and feeding of animals
Course and semester in which it is planned studying of discipline	1 (master's) course, 1 semester
Faculties which students are offered to study discipline	Faculty of Biotechnological
The list of competences and corresponding results of training that is provided by discipline	<p>According to the requirements of the educational and professional program "Technology of production and processing of animal husbandry products", applicants must acquire the ability to acquire the following competencies:</p> <p>ZK 1. Ability to abstract thinking, analysis and synthesis. ZK 2. Ability to conduct research at the appropriate level. ZK 3. Ability to learn and master modern knowledge. ZK 4. Skills in using information and communication technologies. ZK 8. Ability to communicate in the state language both orally and in writing.</p> <p>FC 2. Knowledge of the basic technologies, procurement and storage of fodder, application of the latest technologies of preparation for feeding. FC 7. The ability to evaluate the nutritional value of feed, feed additives, enzyme preparations and other stimulants of animal productivity and to develop science-based feeding systems.</p> <p>The result of studying the discipline is the acquisition by students of higher education of the following knowledge and skills:</p> <ul style="list-style-type: none"> - Ability to abstract thinking, analysis and synthesis. - Ability to conduct research at the appropriate level - Ability to learn and master modern knowledge. - Skills in using information and communication technologies - Ability to plan, organize and conduct scientific research, process, publish and patent their results.
Description of discipline	
Preliminary conditions necessary for studying of discipline	The optional educational discipline "New research methods in animal nutrition" is based on knowledge of such disciplines as "Animal nutrition and feed technology", "Animal anatomy", "Animal physiology", "Animal breeding", "Chemistry", "Biochemistry", "Mathematics" ", "Biometrics", "Microbiology", "Standardization, certification and metrology".
The maximum number of students who can study at the same time	25 students
Subjects of classroom occupations	Topics of lectures 1. A brief history of the development of animal nutrition research.

	<ol style="list-style-type: none"> 2. Directions of animal feeding research that determine scientific and technical progress in animal husbandry. 3. Modern requirements for animal feeding experiments. 4. Scientific justification of setting up the experiment and construction of a working hypothesis. 5. Organization and execution of works on setting up an experiment on animal feeding. 6. Carrying out balance experiments on animals to study feed digestibility. 7. Biometric processing, analysis and evaluation of research results. 8. Economic evaluation of research results. 9. Experiments on cattle. 10. Experiments on sheep and goats. 11. Experiments on pigs. 12. Experiments on birds of different species. 13. Experiments on bees. 14. Production verification of research results. 15. Designing research work based on the results of animal feeding research 16. Submission of an application for an invention and registration of intellectual property rights. <p>Topics of practical classes</p> <ol style="list-style-type: none"> 1. Formulation of research topic on animal feeding Selection of the research topic at the student's request. 2. Compilation of general methods of research on animal feeding. Determination of the purpose, tasks and methods, object and subject of research 3. Scientific substantiation of the setting up of the experiment on the feeding of rural and urban areas. animals (of the student's choice). Collection of material on the topic of research. Construction of a working hypothesis and its defense 4. Development of a scheme and selection of animals for an experiment on the study of digestibility using the method of feed substitution. Methods of studying feed digestibility. Selection of periods in the experiment and establishment of their duration. 5. Development of a scheme and selection of animals for an experiment on the study of digestibility by the method of inert substances. Methods of studying feed digestibility. Selection of periods in the experiment and establishment of their duration. 6. Development of methods for carrying out a balance experiment on ruminants. Development of a general scheme of experiments on the study of metabolism in ruminants 7. Development of methods for carrying out a balance experiment on monogastric animals. Development of a general scheme of experiments on the study of metabolism in monogastric animals 8. Development of methods for carrying out a balance experiment on poultry. Development of a general scheme of experiments on the study of metabolism in poultry <p>Compilation of an experiment scheme on feeding by the group</p>
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	<p>method and selection of cattle.</p> <p>9. Determining the periods of the experiment and establishing their duration. Selection of animals by the method of pairs of analogues and parallel groups of analogues.</p> <p>10. Development of a feeding scheme for experimental pigs depending on the purpose of the study. Replacement of feed in rations according to the amount of dry matter, energy and protein nutrition</p> <p>11. Setting indicators for research on sheep and goats and methods of their determination. Zootechnical indicators. Indicators of metabolism and product quality. Economic indicators of the study</p> <p>12. Compilation of an experiment scheme on poultry feeding by the group method and selection of poultry. Determining the periods of the experiment and establishing their duration. Selection of individuals by the method of pairs of analogues and parallel groups of analogues.</p> <p>13. Compilation of the experiment scheme on bee feeding. Selection of analogue bee families. Determination of periods and indicators for research</p> <p>14. Development of forms for recording feed consumption and productivity of experimental animals. Journal of accounting for given feeds, meals and separated feces. Journal of productivity accounting. Information on zootechnical analysis of fodder and feces</p> <p>15. Preparation of a scientific report, thesis and their defense. Studying the structure and content of the master's thesis. Participation in the defense of graduation theses.</p> <p>16. Preparation of a scientific publication based on research materials. Study of the structure of a scientific publication. Preparation of scientific publications for printing, dissertations for defense.</p>
Teaching language	Ukrainian