

Summary of compulsory discipline

Name of the discipline	Feeding farm animals
Teacher	Vitaliy Bomko doctor of agricultural sciences, professor, head of the department of feed technology, feed additives and animal feeding
Course and semester in which it is planned studying of discipline	2 course, bachelors, the 3rd semester 3 course, bachelors, the 4th 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 3. Ability to apply knowledge in practical situations. ZK 4. Knowledge and understanding of the subject area and understanding of professional activity. ZK 5. Ability to adapt and act in a new situation. ZK 6. Ability to work in a team and have interpersonal skills. ZK 7. Ability to evaluate and ensure the quality of performed works. ZK 8. Efforts to preserve the environment. ZK 9. Ability to search, process and analyze information from various sources.</p> <p>FC 3. The ability to use knowledge of the basic technologies of procurement, production and storage of fodder to form the fodder base of the enterprise. FC 4. Ability to prepare rations for different species and sex-age groups of animals and organize their standardized feeding, taking into account available financial and resource limitations.</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"> • Know the technologies of harvesting, production and storage of hay and artificially dried fodder. • To know the technologies of collection, production and storage of silage and haylage. • To know the technologies of procurement, production and storage of grain fodder and products of their processing. • Determine the standards and prepare complete ration mixtures for young and adult cattle. • Determine the standards and prepare complete ration mixtures for young and adult small cattle. • Determine norms and prepare complete ration mixes for pigs of different sex and age groups.

	<ul style="list-style-type: none"> • Determine the standards and prepare complete ration mixtures for horses. • Determine the standards and make complete ration mixtures for poultry. • Determine the standards and make complete ration mixes for fur animals. • Be able to develop recipes of compound feed, premixes, BVD and BVMD for different types of animals and poultry.
Discipline description	
<p>Preliminary conditions necessary for studying of discipline</p> <p>The maximum number of students who can study at the same time</p> <p>Subjects of classroom occupations</p>	<p>Compulsory educational discipline "Feeding rural-urban of animals" is based on the knowledge of such disciplines as "Chemistry", "Morphology of rural-urban animals", "Physiology of rural and urban animals", "Biochemistry in animal husbandry", "Production, storage and quality control of fodder and feed additives".</p> <p>25 students</p> <p>Topics of lectures</p> <ol style="list-style-type: none"> 1. Assessment of the nutritional value of feeds and rations 2. Digestibility of feeds and rations 3. Metabolism of substances and energy in the body of animals 4. Assessment of energy (total) nutrition of feed. 5. Protein nutrition of fodder 6. Mineral nutrition of fodder 7. Vitamin nutrition of fodder 8. Comprehensive assessment of feed nutrition 9. Fodder products 10. Technology of preparation and use of hay, grass flour, and cuttings 11. Preparation and use of silage and haylage 12. Grain fodder 13. Remains of processing of agricultural raw materials of plant origin 14. Fodder of animal origin 15. Combined feeds, protein-vitamin-mineral supplements, premixes 16. Feed additives 17. Basics of rationed feeding. The need of animals in supporting, productive and reproductive feed. The system of rationed feeding and its main elements Feed rations and their structure for different species and age groups. Zootechnical requirements and preparation of raw data for drawing up rations using a PC. 18. Feeding dry cows, heifers and breeding bulls 19. Feeding dairy cows 20. Feeding young cattle up to 6 months of age and repair young

21. Feeding of young cattle when grown for meat and fattening of adult cattle
22. Biological and economic features of pigs. Feeding of boars, single, farrowing sows Feeding of suckling sows
23. Feeding suckling piglets. Feeding piglets after weaning and repair young
24. Pig fattening and control of the completeness of pig feeding
25. Feeding sheep of different breeds, sexes and age groups. Basic feeds. Feeding of ram breeders Feeding of ewes in preparation for insemination, during the period of calving and lactation Feeding of lambs during the suckling period and after weaning. Feeding of repair youngsters. Feeding of sheep, fattening of sheep. Peculiarities of sheep feeding in pasture and stable keeping. Methods of monitoring the completeness of feeding sheep and goats
26. Horse feeding. Peculiarities of metabolism in horses during work. Nutrient requirements of working horses, feeding of working horses. Peculiarities of feeding stallions, pregnant and suckling mares. Feeding foals and growing young
27. Feeding of farm poultry. Peculiarities of feeding adult chickens and chicks.
28. Peculiarities of feeding turkeys and turkey chicks. Norms, feeds, rations. Feeding technique. Methods of controlling the quality of poultry feeding
29. Feeding of adult waterfowl. Norms, feeds, rations. Feeding technique. Feeding ducklings and goslings. Methods of monitoring the quality and efficiency of feeding young birds.
30. Feeding rabbits. Feeding nutria, fur animals

Topics of practical classes

1. Determination of primary, hygroscopic moisture, raw ash in feed.
2. Determination of crude protein in feed
3. Definition of crude fat
4. Determination of crude fiber
5. Determination of ash, calcium, phosphorus and calculation of the content of nitrogen-free extractive substances.
6. Assessment of the nutritional value of feed by chemical composition.
7. Evaluation of feed nutrition by the amount of digestible nutrients (direct method).
8. Assessment of feed nutrition by the amount of digestible nutrients (incidental method and method of inert substances).
9. Balance of nitrogen and carbon. The balance method of determining material changes in the animal's body
10. Determination of the total nutritional value of feed in oat fodder
11. Determination of the total nutrition of feed in energy feed units (EKO)
12. Evaluation of carbohydrate and fat nutrition of fodder.

13. Protein, vitamin, mineral nutrition of fodder. The concept of a comprehensive assessment of feed nutrition.
14. Calculations on mineral and feed additives.
15. Classification and economic assessment of feed quality.
16. Nutritive value of green fodder. Zootechnical and economic assessment of green fodder.
17. Nutritive value of hay, straw. Artificially dried grass fodder.
18. Nutritive value of silage and haylage.
19. Nutritional value of root vegetables.
20. Nutritional value of grain fodder.
21. Nutritional value of mealy fodder.
22. Nutritive value of cake and meal.
23. Nutritional value of fodder of animal origin.
24. Compound feed.
25. Feeding dry cows
26. Feeding dairy cows
27. Zootechnical assessment of rations of dairy cows.
28. Recipes of mixed feeds, premixes and BVD for dairy cows.
29. Feeding breeding bulls.
30. Feeding calves up to 6 months of age
31. Feeding repair heifers
32. Feeding of young cattle when grown for meat and feeding of adult cattle
33. Technique of feeding breeding boars. Methods of controlling its completeness.
34. Feeding single, farrowing sows. Norms of rations, structure of rations, type and technique of feeding, methods of monitoring its completeness.
35. Feeding suckling sows, piglets. Norms, rations, their structure, type and technique of feeding, methods of monitoring their completeness
36. Pig fattening. Norms, rations and fodder, structure of rations, type and technique of feeding, methods of monitoring its completeness.
37. Sheep feeding. Feeding of ewes in preparation for insemination, during the period of kittenhood and lactation. Feeding norms.
38. Feeding of repair young sheep. Feeding of sheep, fattening of sheep.
39. Feeding work horses. Feeding norms, fodder, feeding technique.
40. Feeding of laying hens of commercial and breeding flocks.
41. Feeding of young birds.
42. Feeding chickens, broiler chickens, ducklings, goslings. Methods of monitoring the quality and efficiency of feeding young birds.
43. Feeding rabbits, nutria (males, females, young). Norms, fodder, feeding technique.
44. Feeding fur animals. Norms, fodder, feeding technique
45. Feeding of stock fish, standards, feed, feeding technique.

Teaching language	Ukrainian
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