Degree of higher education - <u>Bachelor</u>
Speciality 181 ¬ "<u>Food Technologies</u>"
Educational program "<u>Food Technologies</u>"
Study year <u>2</u>, semester <u>3</u>
The form of study is <u>full-time.</u>
Number of ECTS credits: <u>4</u>
The language of instruction is <u>Ukrainian</u>

Lecturer of the course	**<u>Holubieva Tetiana</u>**
Contact information of the lecturer (e-mail)	**<u>k.s.-h.n., docent, golubeva.nubip@gmail.com</u>**
Course page in eLearn	**https://elearn.nubip.edu.ua/course/view.php?id=1019**

DESCRIPTION OF THE DISCIPLINE
(up to 1000 printed characters)

The discipline aims to familiarise with the latest technologies for producing animal husbandry products. Teach students to evaluate the productive qualities of farm animals, determine their need for fodder, control the completeness of animal feeding, and operate on herd reproduction indicators.

The task of the discipline is to provide future specialists with knowledge of the biological foundations of breeding farm animals, the biology of feeding domestic animals of various species and the organisation of scientifically based feeding, feed harvesting technology, methods of evaluating the nutrition and quality of feed, monitoring the completeness of animal feeding, the main parameters and principles of production technology the main types of animal husbandry products in farms with different forms of ownership, which affect exceptional animal husbandry and its intensification.

Competencies of OP:

Integral competencies (IC): The ability to solve specialised problems of different levels of complexity in the learning process using basic theoretical knowledge, a developed system of logical thinking, a complex of theories and methods of fundamental and applied sciences, and to solve practical problems of a technical and technological nature in production conditions of food industry enterprises and restaurant industry.

General competencies (CG):

ZK 2. The ability to learn and master modern knowledge.

ZK 4. Skills in using information and communication technologies.

ZK 5. Ability to search and analyse information from various sources.

ZK 6. The ability to evaluate and ensure the quality of performed works.

ZK 10. Efforts to preserve the environment.

ZK 13. The ability to realise one's rights and responsibilities as a member of society, to be aware of the values of civil society and the need for its sustainable development, the rule of law, and the rights and freedoms of a person and a citizen in Ukraine.

Professional (unique) competences (FC):

SC 1. The ability to introduce food technology into production based on understanding the essence of transformations of the main components of food raw materials during the technological process.

Program learning outcomes (PRP) OP:

PRN2. To show creative initiative and raise one's professional level through continuing education and self-education.

PRN3. I need to be able to apply information and communication technologies for information support of professional activities and conducting applied research.

PRN13. Choose modern equipment for the technical equipment of new or reconstructed enterprises (workshops), know the principles of its operation and rules of operation, and draw up equipment and technological schemes for producing food products of the designed assortment.

STRUCTURE OF THE DISCIPLINE

Topic	Hours (lectures/ laboratory, practical, seminar)	Learning outcomes	Task	Assessment
One semester				
Module 1. Biological features of farm animals and feed technology				
Topic 1. Reproduction and breeding of animals.	2/4	The student should <u>know</u> the importance of breeding work in increasing the productivity of farm animals—the concept of breed and their classification. <u>Understand</u> the concepts of manual, natural, and artificial mating of farm animals and their disadvantages and advantages.	Submission of laboratory work. (including in learn).	**8**
Topic 2. Biological features of animals.	2/4	The student should <u>know</u> the origin and domestication of animals. <u>Understand</u> the biological features of different types of farm animals; distinguish between the concepts of constitution and exterior and their influence on the productivity of farm animals. <u>Be able to</u> calculate indices of body structure of animals and calculations of animal growth.	Submission of laboratory work. (including in clean). Performing independent work.	**8**
Topic 3. Basics of nutrition and feeding of agricultural	2/4	The student should Familiarize himself with the main fodder used in feeding rural and	Submission of laboratory work. (including in learn).	**10**

animals. Fodder and its classification		urban areas. Animals and the main methods of assessing the energy nutritional value of feed. <u>Be able to</u> evaluate cows by milk productivity and animals by meat productivity.		
Topic 4. Standardised feeding of animals	1/2	The student must: <u>Know</u> the general principles of rations. <u>Distinguish between</u> the concept of ration, structure of ration, rate of feeding, and type of feeding. <u>Be able to</u> classify feeds according to the primary nutrients.	Submission of laboratory work. (including in clean). Performing independent work.	**10**
Module 2. Production technology of animal husbandry products				
Topic 5. Production technology of animal husbandry products	2/6	The student must: <u>Know</u> cattle's importance and biological features—milk and beef production technology. Differentiate cattle breeds according to the direction of productivity—reproduction, maintenance and feeding of livestock. <u>Be able to</u> determine feeding rates and prepare rations for cattle.	Submission of laboratory work. (including in clean). Performing independent work.	**8**
Topic 6. Production technology of sheep and goat breeding products	2/6	The student must: <u>Know</u> the meaning and biological features of sheep and goats; milk, meat, down and wool productivity of cattle, maintenance and	Submission of laboratory work. (including in clean). Performing independent work.	**8**

Topic					
		feeding. Determine the suitability of animals for machine milking and determine the volume of livestock production.			
Topic 7. Production technology of pig farming products	2/2	The student must: To know the meaning and biological features of pigs. Classification of breeds by direction of productivity. Food and biological value of pig farming products. Maintenance, feeding, and reproduction of pigs. Be able to determine standards and prepare rations for pigs.	Submission of laboratory work. (including in clean). Performing independent work.		**10**
Topic 8. Poultry production technology	2/2	The student should know the meaning and biological features of poultry. Production technology of poultry meat and eggs. Feeding and its maintenance. Determine standards and make recipes for compound feed for poultry. Assess the quality of eggs.	Submission of laboratory work. (including in clean). Performing independent work.		**8**
Just for one semester					**70**
Exam					**30**
Total for the course					**100**

ASSESSMENT POLICY

Deadlines and Rescheduling Policy:	Works submitted late without good reason will be assigned a lower grade. Modules can be rearranged with the lecturer's permission if there are good reasons (for example, sick leave).
Academic Integrity	Copying during tests and exams is prohibited (including using

Policy:	mobile devices). Abstracts and presentation materials must have correct text references to the used literature.
Attendance Policy:	Attending classes is mandatory. For objective reasons (for example, illness, international internship), training can take place individually (in online form with the agreement of the dean of the faculty).

STUDENT ASSESSMENT SCALE

Rating of a higher education applicant points	The assessment is national for the results of passing exams	
	exams	credits
90-100	perfectly	counted
74-89	fine	
60-73	satisfactorily	
0-59	unsatisfactorily	not counted

Recommended sources of information
The main one

1. Handbook on complete feeding of farm animals; According to scientific ed. I.I. Ibatullina, O.M. Zhukorsky Kyiv: Agrarian science. 2016, 336 p.
2. Ivanenko F. V. Technology of production and processing of animal husbandry products: Educational method. Self-help manual studied disc K.: KNEU, 2014. 125 p. URL: https://core.ac.uk/download/pdf/32617596.pdf.
3. Norms, approximate rations and practical advice on cattle feeding [guide]; edited by I.I. Ibatullina, V.I. Kostenko / [H.O. Bohdanov, I.I. Ibatullin, V.I. Kostenko and others]. Zhytomyr: PP "Ruta", 2013. 516 p.
4. Production technology of animal husbandry products / O.T. Busenko, V.E. Skotsyk, M.I. Matsenko and others Under the editorship of O.T. Busenko. K.: Agro-education, 2013. 492 p.
5. Livestock production technology: a course of lectures / L. S. Patreva, O. A. Koval. Mykolaiv: MNAU, 2017. 277 p.

Auxiliary

1. Anatomy of domestic animals: Textbook / S. K. Rudyk, Yu. O. Pavlovsky, B. V. Kryshtoforova, etc.; Edited by S. K. Rudyk. K.: Agrarian education, 2001. 575 p.
2. Brik, M. M. Current state and prospects for developing the livestock industry in Ukraine. Economic analysis. Ternopil, 2018. Volume 28. No. 4. P. 331-337. URL: file:///C:/Users/Student/Downloads/1649-6565657158-1-PB.pdf.
3. Feeding of agricultural animals: a textbook / I.I. Ibatulin, D.O. Melnychuk, G.O. Bogdanov [and others]; under the editorship I.I. Ibatullina. Vinnytsia: New Book, 2007. 612.
4. Gene pool of agricultural animal breeds of Ukraine: study guide / [V.V. Shuplyk, O.V. Savchuk, I.V. Gudzev and others]. Kamianets-Podilskyi: D.G. Zvoleyko Publishing House, 2013. 352 p.
5. Hopka B.M., Khomenko M.P., Pavlenko P.M. horse breeding K.: Higher School, 2004. 320p.
6. Recipes and technology for preparing kebabs from different types of meat: A practical guide. / [T.M. Prylipko, O.M. Bulatovych, A.T. Zvigun]. Kamianets-Podilskyi: PP "Medobory 2006", 2010. 63 p.
7. Production technology of livestock products / O.T. Busenko, V.D. Stolyuk, V.D. Umanets and others Under the editorship of O.T. Busenko. K.: Agrarian education, 2001. 432 p.
8. Production technology of livestock products / O.T. Busenko, V.D. Stolyuk, O.Y. Mohylyny and others Under the editorship of O.T. Busenko. K.: Higher education, 2005. 496 p.
9. Production technology of pig farming products / According to the general edition of Khomenko M.P. / Textbook 6th edition". Vinnytsia: Nova kniga, 2010. 336 p.

Information resources

1. Association of Pig Breeders of Ukraine: http://asu.pigua.info
2. Agricultural sector of Ukraine: http://agroua.net/animals/

3. Horse riding and equestrian sports: http://www.konevodstvo.org/

4. News from horse breeding and horse breeding: http://konevodstvo.su/

5. The first Ukrainian equestrian magazine http://www.horses.dp.ua/

6. Agrobusiness today: http://www.agro-business.com.ua/

7. Milkua.info http://www.milkua.info/uk/

8. Poultry http://poultry.com.ua

9. Forum of rabbit breeders http://krolikovod.com/phpforum/