

Annotation of compulsory educational component

Subject	Technology of milk and beef production
Lecturer	Borsch Alexander Candidate of agricultural sciences, Associate Professor of the Department of Milk and Meat Production Technology
Course and semester in which it is planned to study the discipline	4th year, 7th and 8th semester
Faculties whose postgraduates are invited to study the discipline	Biology and Technology Faculty
A list of competences and relevant learning results provided by the discipline	<p>According to the requirements of the educational and professional program "Technology of production and processing of livestock products", applicants have to acquire the ability to acquire the following competencies:</p> <p style="padding-left: 40px;">GC 3. Ability to apply knowledge in practical situations.</p> <p style="padding-left: 40px;">GC 4. Knowledge and understanding of the subject area and understanding of professional activities.</p> <p style="padding-left: 40px;">PC 1. The ability to use professional knowledge in the field of production and processing of livestock products for effective business.</p> <p style="padding-left: 40px;">PC 2. The ability to use modern knowledge about the methods of reproduction, patterns of individual development and breeding of animals for effective professional activities in the field of animal husbandry.</p> <p style="padding-left: 40px;">PC 7. The ability to control technological actions in the production and processing of livestock products.</p> <p style="padding-left: 40px;">PC 11. The ability to use the knowledge of the organization and management of the technological action of processing livestock products for the effective conduct of the business of the company.</p> <p>The result of learning this discipline is the acquisition by a higher education students of such knowledge and skills:</p> <ul style="list-style-type: none"> - To have specialized knowledge on the technology of livestock production. - To determine the live weight of livestock; number calves in different ways; take basic measurements of livestock. Identify dairy and beef cattle. Plan insemination and breeding stock. Keep a record of the movement of livestock at the enterprise. Ensure the implementation of schedules for the increase in live weight of animals in growing, fattening and rearing. Cull animals and complete production teams. Organize the transportation and delivery of livestock to processing enterprises in accordance with

the relevant requirements of the standards. Provide parameters and control the technological processes of milk and beef production.

- Be able to apply the means of self-regulation and be able to adapt to new situations (circumstances) of life and activity.

- Establish appropriate relationships to achieve results.

- Know the tactics and strategy of communication, the laws and methods of communicative behavior.

- Be able to choose ways and strategies of communication to ensure effective teamwork.

- Use communication strategies and interpersonal skills.

- Know the methods of assessing performance indicators.

- Ability to deliver quality work. Build relationships to ensure quality work.

- Have specialized knowledge about the methods of reproduction, patterns of individual development and breeding of animals.

- To carry out biometric analysis. control the process of exploitation of producers, evaluate the quality of sperm; use technical means and techniques for diluting and storing sperm outside the body; prepare the breeding stock of animals for reproduction and master the technique and rules of insemination of females of the main animal species.

- Analyze the pedigrees of livestock, assess the exterior of animals and its shortcomings, analyze and take into account the indicators of productivity and individual development of animals, establish the breed affiliation and breed direction of animal productivity.

- Have basic knowledge of the organization and management of the technological process of livestock production.

- Provide parameters and control the technological process of milk and beef production.

- Ensure efficient, uninterrupted and safe operation of machinery and equipment. Prepare accompanying documentation for livestock and deliver them for processing with minimal losses.

- Carry out delivery and acceptance of livestock and animal products for processing with quality control to achieve maximum economic effect. Control the parameters of the technological process of production, storage and sale of milk, slaughter of animals and processing of carcasses; evaluate the fatness of animals intended for slaughter and the quality of carcasses obtained from them; calculate the yield of meat, offal, raw fat and skins and organize their primary processing.

- Have specialized knowledge to ensure the parameters and control the flow of technological processes for the production of livestock products.

	<p>- Introduce and use in practice modern science-based technologies for the production of milk and beef in order to meet the quantitative and qualitative indicators of production.</p>
<p>Description of the discipline</p>	
<p>Previous conditions which are necessary for the study of the discipline</p> <p>The maximum number of graduate students who can study at the same time</p>	<p>The compulsory academic discipline "Technology of production of milk and beef" is based on the knowledge of such disciplines as "Morphology of agricultural animals", "Genetics with biometrics", "Hygiene and welfare of animals", "Physiology of agricultural animals", "Feeding agricultural animals", "Breeding agricultural animals", "Economics and management of enterprises", "Mechanization in animal husbandry" studied in previous courses.</p> <p>30 students</p>
<p>Classroom topics</p>	<p><i>Content module 1. Biology, breeds, dairy and meat productivity of cattle</i></p> <ol style="list-style-type: none"> 1. Introduction. Significance, current state and prospects for the development of cattle breeding in Ukraine 2. Biological characteristics of cattle 3. Origin of cattle 4. Appearance and constitution of cattle 5. Stress resistance of cattle 6. Breeds of cattle - specialized and combined 7. Zootechnical bases for herd reproduction. Sexual and economic maturity of cattle. Inter-hotel cycle and its periods 8. Milk performance 9. Meat productivity <p><i>Content module 2. Technological processes and operations on dairy farms. Modernization of technological processes</i></p> <ol style="list-style-type: none"> 1. The concept of technology, technological and workflow in animal husbandry 2. Modern technologies for keeping dairy cattle 3. The main premises and facilities of the farm 4. Organization of cow feeding 5. Placement and grouping of dairy cattle on the farm 6. Organization of process control 7. Conditions for obtaining high quality milk 8. Modern milking technology 9. Zootechnical aspects of machine milking of cows on farms and complexes

	<p>10. Organization of rest and exercise of cows on farms</p> <p>11. Farm manure removal</p> <p>12. Draft working and operational modeling of processes in cattle breeding</p> <p>13. Keeping animals in maternity wards</p> <p>14. Summer maintenance of BRS</p> <p>Content module 3. Selection and breeding work in cattle breeding, rearing of replacement young stock, beef production technology.</p> <p>1. Theoretical foundations of selection in cattle breeding</p> <p>2. Evaluation and selection of animals for breeding in dairy cattle herds</p> <p>3. Methods for assessing sires by the quality of offspring</p> <p>4. Grading of cattle</p> <p>5. Selection in cattle breeding</p> <p>6. Breeding methods for cattle</p> <p>7. Technology of growing and using bulls</p> <p>8. Scientific basis for rearing young animals</p> <p>9. Systems and methods of keeping and feeding young animals of all ages</p> <p>10. Peculiarities of rearing young stock in different farms</p> <p>11. Modern technologies for growing replacement heifers</p> <p>12. Types of farms for growing and fattening cattle</p> <p>13. Peculiarities of rearing young animals for meat in the milk period and after the milk period</p> <p>14. Feeding livestock</p> <p>15. Beef production technology in dairy cattle breeding on specialized farms</p> <p>16. Features of specialized beef cattle breeding</p> <p>17. Simulation of the process of growing and fattening cattle</p>
Language of teaching	Ukrainian