### **Annotation of the optional educational component**

The name of the discipline	Meat Cattle Breeding
Lecturer	Lastovska Iryna Oleksandrivna Candidate of Agricultural Sciences, Associate Professorof of the Department of Technology of Milk and Meat Production
Course and semester, which is planned to study the discipline	4 course, 7 semester
The faculties and students which are invited to study the discipline	The Faculty of Biology and Technology
List of competencies and related outcomes of learning that the discipline provides	According to the requirements of the educational-professional program "Technology of production and processing of livestock products" applicants must acquire the ability to obtain the following competencies:  GC 3. Ability to apply knowledge in practical situations;  GC 4. Knowledge and understanding of the subject area and understanding of professional activity;  PC 1. Ability to use professional knowledge in the field of production and processing of livestock products for effective business management.  PC 2. The ability to use modern knowledge about methods of reproduction, patterns of individual development and breeding of animals for effective professional activity in the field of animal husbandry.  PC 7. The ability to control technological processes during the production and processing of livestock products.  PC 11. The ability to apply knowledge of the organization and management of the technological process of livestock production processing for the effective management of the enterprise's economic activity.  The result of studying the discipline is the students' acquisition of such knowledge and skills:  -Have specialized knowledge of the technology of production of meat products.  Determine the live weight of livestock; number calves in different ways; take basic measurements of livestock. Identify beef cattle. Plan insemination and calving of uterine livestock. Keep records of livestock movements at the enterprise. Ensure compliance with live weight gain schedules for fattening and rearing. Reject animals and complete production teams. Organize transportation and delivery of livestock to processing enterprises according to the relevant requirements of the standards. Provide parameters and control technological processes for beef production.  -Be able to apply means of self-regulation and be able to adapt to new situations (circumstances) of life and activity.  -Establish appropriate connections to achieve

results.

- -Know the tactics and strategy of communication, laws and ways of communicative behavior.
- -Be able to choose ways and strategies of communication to ensure effective teamwork.
- -Use communication strategies and interpersonal skills.
- -Know methods for 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.
- -Perform biometric analysis. To control the process of exploitation of broodstock, to assess the quality of sperm; use technical means and methods of dilution and organization of storage of sperm outside the body; to prepare the uterine population for reproduction and to have the technique and rules of insemination of females of the main species of animals.
- -Analyze the pedigrees of beef cattle, assess the exterior of animals and their defects, analyze and account for indicators of productivity and individual development of animals, establish the breed 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 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.
- To carry out the delivery acceptance of animals for processing with quality control to achieve the maximum economic effect. Control the parameters of the technological process of slaughtering animals and processing 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.
- -Introduce and use in practice modern scientifically based technologies for the production of beef in order to fulfill the quantitative and qualitative indicators of production.

### **Description of the discipline**

# Preconditions necessary for the study of the discipline

Compulsory educational component « **Meat Cattle Breeding** » is based on knowledge of such disciplines as «Morphology of farm animals», «Genetics with

## Maximum number of students who can simultaneously study

#### **Topics of classroom lessons**

biometry», «Animal breeding»"Technology of reproduction of animals", "Feeding of agricultural animals", "Production, storage and quality control of fodder and feed additives", "Hygiene and welfare of animals", "Economics and management of enterprises" studied in previous courses.

#### 25 students

#### **Topics of lectures**

- 1. Principles of academic integrity. Meat cattle breeding: characteristics of the industry, state and prospects of development in Ukraine and abroad. Scientific and practical bases of formation of meat productivity of cattle of meat breeds.
- 2. Biology of beef cattle and technological qualities of beef cattle.
- 3. Cattle breeds of meat production direction.
- 4. Breeding, reproduction and breeding in beef cattle breeding.
- 5. Systems and methods of keeping beef cattle.
- 6. Technology of obtaining, growing and using breeding cattle of specialized meat breeds. Organization of fodder base for meat cattle breeding.
- 7. Economics of beef production and management of beef farms.

#### Themes of practical classes

- 1. Lifetime estimation of meat productivity of cattle of specialized meat breeds.
- 2. Forecasting of the basic parameters of breeding cattle for meat and production of beef at the farm.
- 3. Post-butchering estimation of meat productivity of meat cattle breeds.
- 4. Fat stock of meat cattle and ways of its determination.
- 5. Types of constitution and exterior of beef cattle.
- 6. Methods of assessing the exterior of beef cattle. Identification and accounting in meat cattle breeding.
- 7. Bonitation of specialized meat cattle breeds. Bonitation of cows of specialized meat breeds (under conditions of production).
- 8. Linear-group selection in meat cattle breeding. Measures to intensify the reproduction of herds in meat cattle breeding.
- 9. Technological project of the production process at the projected commodity meat farm.
- 10. Planned production of beef at the projected commodity meat farm.
- 11. Technological solution for the maintenance of meat cattle of the projected commodity meat farm.
- 12. Intensive and grazing stock of the herd. Calculation of the annual requirement for meat cattle at the projected farm.
- 13. Efficiency of production at the projected farm. Principles of management at farms engaged in breeding of meat cattle.
- 14. Writing of a resume to the business plan of the

	projected commodity meat farm. Features of meat cattle breeding in areas contaminated with products of radioactive decay.
Language of teaching	Ukrainian