

## Annotation of compulsory discipline

<b>Academic discipline</b>	<b>Organization of selection and breeding work in animal husbandry</b>
<b>Tutor</b>	<b>Tytarenko Iryna Vasylivna</b> Phd in agriculture, associate professor, Department of Animal Genetics, Breeding and Selection
<b>Courses and semesters, when the discipline is planning to study</b>	1 course (master degree), 1 semester
<b>Faculties whose students are invited to study discipline</b>	Biological-technological faculty
<b>List of competencies and learning-related outcomes that discipline provides</b>	<p>According to the requirements of the educational and professional program "Technology of production and processing of animal husbandry products", applicants must acquire the following competencies:</p> <p>GC 1 (general competence). Ability to abstract thinking, analysis and synthesis.</p> <p>GC 2. Skills in using information and communication technologies.</p> <p>GC 3. The ability to organize and monitor the implementation of measures aimed at improving the selection and breeding work in animal husbandry.</p> <p>PC 6. (professional competence). The ability to practically manage working or educational processes in the field of production and processing of products of animal origin, which are complex, unpredictable and require new strategic approaches.</p> <p>PC 10. The ability to clearly and unambiguously convey one's own knowledge, conclusions and arguments to specialists and non-specialists, in particular to students.</p> <p>The result of studying the discipline is the students' acquisition of such knowledge and skills:</p> <ul style="list-style-type: none"> <li>- to develop, implement and modernize effective technologies and processes in the field of production and processing of livestock products (based on the analysis of zootechnical information in breeding livestock, to be able to characterize the quantitative and qualitative traits of the population, the influence of genetic and environmental factors on it, and to be able to characterize various methods of creating new breeds and types of farm animals; be able to develop models of selection processes in a breed or herd and implement them in practice);</li> <li>- to search for the necessary data in scientific literature, databases and other sources, analyze and evaluate this data (to know modern breeding achievements in breeding livestock in Ukraine and abroad; to be able to apply the acquired Ukrainian and foreign experience in the organization of selection and breeding work;</li> <li>- to make effective decisions on the production and processing of livestock products, including in difficult and unpredictable conditions, forecast their development, determine factors affecting the achievement of set goals, analyze and compare alternatives, assess risks and likely consequences of decisions (to be able to perform selective and breeding work at the level that provides indicators in accordance with the requirements of the minimum value, and improve them to the levels of breeding subjects; to be able to evaluate breeding work in the herd and develop measures aimed at improving the characteristics of animal productivity; to be able to analyze the state of populations and make long-term forecast of the development of the gene pool of the population under the influence of new factors);</li> <li>- to be responsible for the development of professional knowledge and</li> </ul>

	practices, evaluation of the strategic development of the team, formation of an effective personnel policy (based on the study of the Laws of Ukraine on breeding matters in animal husbandry, which regulate the legal, organizational and economic foundations of breeding work, to be able to use their main provisions in practical work aimed at effective use of breeding resources, improvement of breeding and productive qualities of farm animals).
<b>Description of the discipline</b>	
<b>Preconditions necessary for the study of discipline</b>	Compulsory discipline "Organization of selection and breeding work in animal husbandry" is one of the disciplines in master's degree course of higher education in specialty 204 - Technology of production and processing of animal husbandry products. It is based on the knowledge of such disciplines as "Genetics with biometrics", "Animal breeding", "Technology of meat and beef production", "Technology of production of pig products", "Technology of production of sheep and goats products" "Technology of production of poultry products", "Horse breeding", "Economics and management of enterprises", "Jurisprudence".
<b>Maximum number of students who can study simultaneously</b>	75 students
<b>Lesson plans</b>	<p><b>Lectures</b></p> <ol style="list-style-type: none"> <li>1. Genetic basis of evolution.</li> <li>2. Theoretical basis of selection.</li> <li>3. Breeding process in animal husbandry</li> <li>4. Organization of selection and breeding work and development of selection programs.</li> <li>5. Breeding of dairy and beef cattle.</li> <li>6. Breeding of pigs.</li> <li>7. Breeding of horses, sheep and goats.</li> <li>8. Selection of poultry.</li> <li>9. Law of Ukraine " On Breeding Work in Animal Husbandry".</li> <li>10. Identification and registration of farm animals in Ukraine.</li> <li>11. State certification in breeding livestock.</li> <li>12. State approval of breeding achievements in animal husbandry.</li> <li>13. State support for animal husbandry.</li> <li>14. Development of breeding work plans and measures for their implementation.</li> </ol> <p><b>Practical classes</b></p> <ol style="list-style-type: none"> <li>1. Determination of the mean square deviation (<math>s</math>) and the coefficient of variability (<math>C_v</math>) according to the main selection characteristics.</li> <li>2. Determination of the heritability coefficient (<math>h^2</math>) according to the main selection traits.</li> <li>3. Evaluation of selection traits. Basic principles of selection and breeding.</li> <li>4. Selection of replacement cattle by origin and main economic and useful characteristics.</li> <li>5. Evaluation of dairy cattle.</li> <li>6. Evaluation of beef cattle.</li> <li>7. Evaluation of boars and sows.</li> <li>8. The main selection traits in horse breeding.</li> <li>9. Organization of data records as the basis of work in animal husbandry</li> <li>10. Identification of different types of farm animals.</li> <li>11. License and license terms.</li> <li>12. State approval of breeding achievements.</li> <li>13. Issuance of documents for the assignment of status to the subjects of the breeding business during their state attestation.</li> <li>14. Principles of creating of breeding plans.</li> </ol>
<b>Language of teaching</b>	Ukrainian

