

Annotation of the optional educational component

Name of discipline	Aquaculture species production technologies
Teacher	Sobolev Oleksander Ivanovych Doctor of agricultural sciences, Professor of the Department of technology in poultry and pig breeding
Course and semester, in which it is planned to study the discipline	3th year, 1st semester
Departments where students are invited to study the discipline	Faculty of Biotechnological
The list of competencies and related learning outcomes that provide discipline	<p>According to the requirements of the educational-professional program "204 Technology of production and processing of livestock products" applicants must acquire the ability to obtain the following competencies:</p> <p>GC 3. Ability to apply knowledge in practical situations.</p> <p>GC 4. Knowledge and understanding of the subject area and understanding of professional activity.</p> <p>GC 5. Ability to adapt and act in a new situation.</p> <p>GC 6. Ability to work in a team and interpersonal skills.</p> <p>GC 7. Ability to evaluate and ensure the quality of work performed.</p> <p>PC 1. The ability to use professional knowledge in the field of production and processing of livestock products for effective business.</p> <p>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>PC 4. The ability to compose diets for different species and sex and age groups of animals and organize their rationed feeding, taking into account the existing financial and resource constraints.</p> <p>PC 10. The ability to use the knowledge of morphology, physiology and biochemistry of different animal species for the implementation of effective technologies for the production and processing of their products.</p> <p>PC 13. The ability to use special knowledge to carry out sanitary and hygienic and preventive measures on farms and other facilities for the production and processing of livestock products.</p> <p>The result of teaching the discipline is the acquisition by students of the following knowledge and skills:</p> <ul style="list-style-type: none"> - know the main stages of technological processes of growing commercial fish for two- and three-year turnovers; - be able to use the latest fish and biological standards for breeding and rearing fish; - know the biological features of aquaculture, the impact of environmental conditions on the life of aquatic organisms; - know the types, systems, forms of fish farming, the production structure of fish farms, the arrangement of fish ponds; - know the production processes in hot and cold water ponds; - know the order of operations when performing various types of

	<p>work related to the reproduction of young and the cultivation of fish stock and marketable fish;</p> <ul style="list-style-type: none"> - know the methods of control and accounting of work performed in fish farming; - know the patterns of formation of reproductive, external, morphological and physiological traits in fish breeding; - be able to carry out selection and selection of parental forms, as well as interbreed and intrabreed crosses, industrial hybridization; - know the features of technologies for working with feed in fish farming (transshipment and reloading); - know the chemical composition and digestibility of feed, their energy and differentiated nutrients, requirements for quality and water resistance; - be able to calculate the needs of the farm in fish feed; to determine the need of fish of different species, age and technological groups in energy and nutrients and to monitor the rate of feeding and its completeness; determine the methods, sequence and frequency of distribution of feed to fish of different species; cultivate and breed live fish feed, store and use them in fish feeding; - know the basics of technology for reproduction of valuable objects of aquaculture (carp, herbivorous fish) in natural and factory conditions; - know the methods of increasing the bioproductivity and fish productivity of fish ponds; - know the technology of growing fish material and marketable fish for different forms and cycles of fish farming in pond fish farms of different aquaculture zones; - know the features of the organization of production processes in combined forms of fisheries; - know the methods and requirements for the transportation of fish stock and marketable fish; - be able to conduct work in fisheries on the main technological processes associated with keeping the offspring of cultivated fish species, obtaining offspring from them (in pond and factory conditions), raising young fish to viable stages, growing fish stock and marketable fish, depending on systems, forms and cycle of fishery management; - know the physical properties of water and methods for their determination; - know the requirements for the quality of water entering the ponds of carp and trout farms; - know the principles of organization of preventive and curative measures in fisheries of different types; - be able to determine the sanitary quality of water, soil and feed when growing fish in reservoirs; - be able to carry out disinfection and disinvasion of reservoirs and equipment in fish farming.
--	--

Course description	
---------------------------	--

Prerequisites for the study of the discipline	<p>The elective course "Technology of aquaculture production" is based on knowledge of such disciplines of fundamental and professional training as "Genetics and selection of animal behavior", "Production, storage and quality control of feed and feed additives", "Feeding of farm animals", "Breeding of farm animals" and "Animal hygiene and sanitation" studied in</p>
--	---

	previous courses.
Maximum number of students who can study	25 students
Topics of classroom classes	<p><i>Content module 1. Technology of reproduction and cultivation of the main objects of pond fish farming</i></p> <p>Topic 1.1. Classification and species diversity of pond fish. Biological features of pond fish. Topic 1.2. Organization of pond fisheries. Topic 1.3. Technology of reproduction of the main objects of pond fish farming. Topic 1.4. Technology of rearing young fish.</p> <p><i>Content module 2. Technology of growing fish planting material and marketable fish</i></p> <p>Topic 2.1. Technology of growing fish planting material. Topic 2.2. Fish wintering technology. Topic 2.3. Technology of commercial fish farming in a two-year cycle.</p>
Teaching language	Ukrainian