

Annotation of the selective educational component

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| Academic discipline | Decorative Aquaculture |
| Lecturer | Alla Trofymchuk Candidate of Agricultural Sciences, Associate Professor Department of Ichthyology and Zoology |
| The course and semester, when the discipline is planning to study | 3 rd course, 5 th semester |
| Faculties whose students are invited to study discipline | Faculty of Ecology |
| List of competencies and learning-related outcomes that discipline provides | <p>According to the requirements of the educational and professional program "Aquatic bioresources and aquaculture", students must acquire the ability to acquire the following competencies:</p> <p>Integral Competence. The ability to solve complex specialized tasks and practical problems in the field of aquatic bioresources and aquaculture or in a learning process characterized by complexity and uncertainty of conditions, and involves the application of theories and methods of biology and applied sciences.</p> <p>GC (general competence) 8. Knowledge and understanding of the subject area and understanding of professional activities.</p> <p>GC 9. Ability to apply knowledge in practical situations.</p> <p>SC (Special (professional, subject) competencies) 2. Ability to investigate biochemical, hydrobiological, hydrochemical, genetic, and other changes in aquatic biological resources and aquaculture and habitats.</p> <p>SC 8. The ability to perform ichthyopathological, hydrochemical, and hydrobiological studies to diagnose fish diseases, assess their course, and the effectiveness of treatment and prevention.</p> <p>The result of training in the discipline is the acquisition by students of such knowledge and skills:</p> <ul style="list-style-type: none"> - To be able to influence the hydrochemical and hydrobiological parameters of the aquatic environment of aquariums on the physiological state of their inhabitants - aquarium fish, and invertebrate plants. - Know the systematics and physiological characteristics of ornamental fish. - To be able to perform hydrochemical, hydrobiological, and ichthyopathological studies to diagnose diseases of aquarium fish, evaluate their course, and the effectiveness of prevention and treatment. - To be able to provide rational feeding of ornamental aquaculture objects. - Be aware of the need to use live foods and the dangers that can arise from doing so. |
| Description of the discipline | |

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| <p>Preconditions necessary for the study of the discipline</p> <p>The maximum number of students who can study simultaneously</p> | <p>The selective academic discipline "Decorative Aquaculture" is based on the knowledge of such disciplines as "Zoology", "General Ichthyology", "Hydrochemistry", "Hydrobiology", "Cultivation of non-fish objects".</p> <p>Lectures - 50 students Practical - 25 students</p> |
| <p>Lesson plans</p> | <p>Lectures</p> <ol style="list-style-type: none"> 1. Introduction. Fundamentals of ornamental aquaculture 2. Features of cultivation objects for ornamental aquaculture 3. Physiological characteristics of ornamental fish. 4. Preparation and purification of water. Equipment for ornamental pond, and pool. 5. Aquatic plants for ornamental ponds and their functions 6. Decorative mariculture 7. Diseases of aquarium fish causes and methods of dealing with them 8. Fundamentals of rational feeding of fish 9. Feed the base of reservoirs for growing ornamental fish. Cultivation of live food. 10. Breeding and maintenance of invertebrates in pools and aquariums. 11. Cultivation and maintenance of fish in ornamental ponds. Features of incubation. 12. Breeding and keeping fish of the carp family. 13. Breeding and maintenance of fish of the cyclic family. 14. Breeding and maintenance of fish of the family of short-toothed. 15. Breeding and keeping fish of the catfish family. <p>Practical classes</p> <ol style="list-style-type: none"> 1. Methods for monitoring the main hydrochemical parameters of water: O₂, pH, water hardness, nitrites, and nitrates in aquariums where ornamental fish are grown. 2. Plants used for cultivation in fresh water. 3. Plants used for growing in salt water. 4. the trait of the main types of ornamental mariculture. 5. Basic medicines for the treatment of fish. 6. Disinfectants in ornamental aquaculture. 7. Fundamentals of rational feeding of fish. 8. Methods of propagation of live food. 9. Invertebrates in ornamental aquaculture. 10. Fundamentals of breeding representatives of the carp family. 11. Fundamentals of breeding representatives of the cichlid family. 12. Fundamentals of breeding representatives of the family of koremozoans. 13. Fundamentals of breeding representatives of the catfish family. |
| <p>Teaching language</p> | <p>Ukrainian</p> |