

### Annotation of the selective educational component

<b>Academic discipline</b>	<b>Sanitation and hygiene in fishery</b>
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<b>The course and semester, when the discipline is planning to study</b>	4 <sup>th</sup> course, 8 <sup>th</sup> semester
<b>Faculties whose students are invited to study discipline</b>	Faculty of Ecology
<b>List of competencies and learning-related outcomes that discipline provides</b>	<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> <ul style="list-style-type: none"> <li>– 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.</li> <li>– GC (general competence) 8. Knowledge and understanding of the subject area and understanding of professional activities.</li> <li>– GC 11. Ability to identify, identify and resolve problems.</li> <li>– SC (special competence) 1. Ability to analyze the conditions of the aquatic environment of natural origin, including anthropogenic impacts, in terms of fundamental principles and knowledge of aquatic bioresources and aquaculture.</li> <li>– SC 2. Ability to investigate biochemical, hydrobiological, hydrochemical, genetic, and other changes in aquatic biological resources and aquaculture and habitats.</li> <li>– 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.</li> </ul> <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"> <li>- Understand the basics of fish farming, use the knowledge gained on the hygiene and sanitation of natural and artificial reservoirs at the appropriate level for the main types of professional activities.</li> <li>- To use knowledge and understanding of the chemical composition and classification of natural waters, the</li> </ul>

	<p>temperature regime of water bodies, the oxidizability of water, pH, the content of nutrients, methods of influencing the chemical composition and gas regime of water in natural and artificial reservoirs, the use of natural waters in the cultivation of objects of aquatic biological resources and aquaculture.</p> <ul style="list-style-type: none"> <li>- Use knowledge and understanding of biotopes of water bodies, life forms of aquatic organisms, the influence of factors on aquatic organisms, their vital activity, populations of aquatic organisms and hydrobiocenoses, hydroecosystems, hydrobiology of seas, oceans, continental water bodies when growing objects of aquatic biological resources.</li> <li>- Design and ensure the operation of water supply and cleaning systems for fish breeding facilities, taking into account sanitary and hygienic requirements.</li> <li>- The ability to influence the hydrochemical and hydrobiological parameters of the aquatic environment on the physiological state of aquatic living organisms.</li> <li>- Ability to conduct experiments with aquatic bioresources and aquaculture independently, and to describe, analyze and critically evaluate experimental data.</li> <li>- Ability to conduct research at the level.</li> <li>- The ability to perform ichthyopathological, hydrochemical, and hydrobiological studies to diagnose fish diseases, assess their course, and the effectiveness of treatment and prevention.</li> </ul>
<b>Description of the discipline</b>	
<p><b>Preconditions necessary for the study of the discipline</b></p> <p><b>The maximum number of students who can study simultaneously</b></p>	<p>The selective academic discipline " Sanitation and hygiene in fishery" is based on the knowledge of students obtained in the disciplines: "Biological basics of fishery", "Hydroecology", "Physiology and biochemistry of aquatic organisms", "Hydrochemistry", "Safety". In addition, it is interconnected with the disciplines: of "Aquaculture of artificial reservoirs", and "Fishery hydrotechnics and fundamentals of design".</p> <p>Lectures - 50 students Practical - 25 students</p>
<b>Lesson plans</b>	<p><b>Lectures</b></p> <p>Content module 1. Sanitary and hygienic assessment of the quality of hydrobionts.</p> <ol style="list-style-type: none"> <li>1. Introduction. Sanitation and hygiene in fish farming as a system of control measures in the production and processing of hydrobiont products.</li> <li>2. Nutritional and biological value, the morphological and chemical composition of commercial fish.</li> <li>3. Hygienic requirements for the transportation of animal hydrobionts.</li> </ol> <p>Content module 2. Fundamentals of hygiene and prevention of fish diseases in ponds, lakes, and rivers.</p>

	<p>4. Hygiene and sanitary assessment of fish for diseases.</p> <p>5. Hygiene and sanitary assessment of fish in parasitic diseases.</p> <p>6. Hygiene of poisonous and suspicious fish.</p> <p>7. Sanitary and hygienic requirements for canned food from hydrobionts.</p> <p><b>Practical classes</b></p> <p>1. Introduction. Security technique. Academic virtue. Sanitary and hygienic control of water. Sanitary and hygienic assessment of water.</p> <p>2. Determination of the physical properties of water.</p> <p>3. Sanitary and hygienic control of chemical properties and gas composition of water.</p> <p>4. Biological analysis of water: bacteriological and helminthological research.</p> <p>5. Technical biological and chemical methods of fighting garbage fish.</p> <p>6. Rules for the selection of pathological materials and toxicological studies of biological material, water, and soil.</p> <p>7. Preventive treatment of fish in spring and autumn during transplantation.</p>
<b>Teaching language</b>	Ukrainian