

### Annotation of the selective educational component

<b>Academic discipline</b>	<b>Acclimatization of hydrobionts</b>
<b>Lecturer</b>	Oleksandr Khomiak Candidate of Agricultural Sciences, Associate Professor Department of Ichthyology and Zoology
<b>The course and semester, when the discipline is planning to study</b>	3 <sup>rd</sup> course, 5 <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) 7. Ability to search, process, and analyze information from various sources.</li> <li>– GC 8. Knowledge and understanding of the subject area and understanding of professional activities.</li> </ul> <p>SC (special competencies) 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.</p> <ul style="list-style-type: none"> <li>– SC 9. Ability to perceive new knowledge in the field of aquatic bioresources and aquaculture and integrate it with existing ones.</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>- Know the procedure for conducting acclimatization work, forms, types, and methods of acclimatization;</li> <li>- Know how to select forms for acclimatization;</li> <li>- Know the methods of purification of parties of immigrants from biological impurities, and bacterial, infectious, and parasitic lesions;</li> <li>- Know the means of transportation;</li> <li>- Know the procedure for transplantation.</li> <li>- Own the basic methods of biological substantiation of acclimatization;</li> <li>- be able to select and select objects of acclimatization;</li> <li>- be able to carry out preventive treatment of objects of introduction, reacclimatization, and acclimatization in water bodies of introduction;</li> <li>- Be able to generalize empirical data.</li> </ul>

<b>Description of the discipline</b>	
<b>Preconditions necessary for the study of the discipline</b>	The selective academic discipline "Acclimatization of hydrobionts" is based on the knowledge of such disciplines as "Hydrobiology", "General Ichthyology", "Special Ichthyology", and "Biological bases of fisheries".
<b>The maximum number of students who can study simultaneously</b>	Lectures - 50 students Practical - 25 students
<b>Lesson plans</b>	<p><b>Lectures</b></p> <ol style="list-style-type: none"> <li>1. Categories of acclimatization of hydrobionts</li> <li>2. Full-cycle and non-full-cycle acclimatization of hydrobionts</li> <li>3. Restoration of connections between introduced species and the abiotic environment of the colonization reservoir</li> <li>4. Restoration of connections between introduced species and the biotic environment of the colonization reservoir</li> <li>5. General scheme for the implementation of acclimatization of hydrobionts</li> <li>6. The concept of biotechnology of acclimatization of hydrobionts</li> <li>7. Methods for cleaning planting material from associated species, parasites, and pathogens of infectious diseases</li> </ol> <p><b>Practical classes</b></p> <ol style="list-style-type: none"> <li>1. Geographical and bioecological methods of selecting recruits.</li> <li>2. Selection of species for acclimatization according to economic value</li> <li>3. Selection of species for acclimatization based on the biological value</li> <li>4. The concept of the receiving capacity of recipient water bodies. Ecological and biotic capacity</li> <li>5. Factors determining the biotic capacity of recipient water bodies. Evaluation of the biotic capacity of recipient water bodies by types of trophic organization of hydrobiocenoses.</li> <li>6. Main and promising objects for acclimatization work among fish</li> <li>7. Main objects for acclimatization work among food invertebrates</li> <li>8. Main and promising objects for acclimatization work among industrial invertebrates</li> <li>9. Capture and placement of parties of introduced species before transportation and before release into the recipient reservoir</li> <li>10. Conditions for transporting introduced species</li> <li>11. Spontaneous settlement of hydrobionts and pollution of aquatic ecosystems</li> <li>12. Evaluation of the impact of introductions of fish and food invertebrates on the fauna of water bodies of their introduction.</li> </ol>
<b>Teaching language</b>	Ukrainian