Annotation of the selective educational component

Academic discipline	**Restorative ichthyoecology**
Lecturer	**Nataliia Hrynevych** Doctor of Veterinary Sciences, Professor Department of Ichthyology and Zoology
The course and semester, when the discipline is planning to study	1st course, 2nd semester
Faculties whose students are invited to study discipline	Faculty of Ecology
List of competencies and learning-related outcomes that discipline provides	The result of training in the discipline is the acquisition by students of such knowledge and skills: - Know the patterns of fish fauna reproduction in hydroecological corridors for conservation purposes. - Understand the concept of ichthyoecological assessment of the situation - identification of spatial biomarkers of reproduction. - Be able to determine the amount of valuable fish species that can be harvested. - Be able to organise measures to improve the situation with the protection and reproduction of rare, endangered and commercial species of native fish fauna of natural reservoirs.
Description of the discipline	
Preconditions necessary for the study of the discipline	The discipline "Restorative ichthyoecology" is based on the knowledge of such disciplines as "Protection of aquatic organisms", "Biological monitoring of the aquatic environment", "Fish population dynamics" and is interrelated with the disciplines "Modelling of technological processes in fish farming", "Hydro-radiobiology".
The maximum number of students who can study simultaneously	Lectures - 50 students Practical - 25 students
Lesson plans	**Lectures** 1. Ichthyoecological and hydroecological problems of land reclamation and hydraulic engineering construction in the basins of large rivers of Ukraine. 2. The impact of river network transformation on the conditions of reproduction of native fish fauna. 3. Formation of crisis situations and antioxidant mechanisms of survival of native fish species. 4. The diversity of ecological niches (boundary ecotones) in hydroecological corridors is the basis for the survival of native fish fauna.

	5. Adaptation mechanisms of survival of commercial fish populations to changes in the hydroecological regime of surface waters. Strategy of nature use and management of transformed river basins. 6. Stressful situations in aquatic ecosystems. Degradation of ichthyocenosis of native fish species in the region under the influence of stressful situations. 7. Social and environmental monitoring of the functioning of river ecosystems. 8. Environmental protection and rehabilitation measures to restore the native fish fauna of natural reservoirs. **Practical classes** 1. Peculiarities of localisation of the native ichthyofauna in the water bodies of the Dnipro River basin. 2. The concept of the formation of stressful situations in aquatic ecosystems. 3. Response of aquatic biota to abiotic and biotic factors. 4. Components of ichthyocenosis formation in natural reservoirs. 5. Means of managing the sustainability of aquatic ecosystems. 6. Assessment of the ichthyoecological situation in river basins using spatial biomarkers. 7. Ecological water quality, the state of transformation of riverbeds and floodplains. 8. Calculating the risk of survival of a species (population) in water bodies.
Teaching language	Ukrainian