

Course Annotation

Course Title: **Landscape Ecology**

ECTS Credits: 2 (108 h.)

Course objective

To provide insight into theoretical knowledge and practical skills in the study of geosystems of different scale levels using up-to-date geoecological approaches.

Course tasks

- To create awareness of the methods for assessment and prediction of state of landscapes, landscape-formative factors and principles of geosystems modeling.
- To study the arrangement regularities of Earth's landscape areas, as well as location features and function of natural areas.

Course main chapters

History of Landscape Sciences and Landscape Ecology. The system approach to the study of natural systems. The concept and the basic characteristics of the landscape. Landscape classification. Structure and dynamics of landscapes. The concept of geosystems. Hierarchical series of geosystems. Graphic ecosystem models and geosystems. Zoning and zoning. Geographical zones and zones of the Earth. Mapping of landscape profiles. City landscape organization.

Learning outcomes

After attending the course students will be able to:

- Sort out the facies, tracts and landscapes at site and on geographical maps;
- Make landscape profiles;
- Analyze the main landscape-forming factors;
- Plot the climate diagrams;
- Assess the level of anthropogenic impact on the landscapes and to determine the ways of their ecological recovery;
- Apply the principles of landscape organization in urban areas.

Teaching methods used:

- lectures and practical training sessions.

Final **assessment** of student's knowledge and practical skills is **examination**.

**Head of the Ecology Department,
Professor**

A.I. Gorova