

GEN/DA2030 Ecological Data Evaluation

Code

GEN/DA2030

Title

Ecological Data Evaluation

Prerequisites

no

Credits

3

Description

This course will help the students to better understand the world around us, describe ecosystems through research and analysis of ecological data. The course will help you to think analytically in order to understand environmental problems and reduce their negative impact on human life. This course covers the following topics: ecological data collection, types of ecological data, ecological footprint, human population growth and environment, global warming, environmental health and toxicology, air and water pollution, ecological impact and ecological risk assessment in energy, natural resources and resource management. Applications of environmental content based on real-life examples of the local, national (Kazakhstan) and international levels will be used to better introduce students to the concepts of data collection, ecological impact assessment, future predictions in ecological area. Such activities will also help students to improve their thinking/reasoning skills by solving quantitative problems, performing graph activities and making estimates on the contribution of anthropogenic activities to global environmental problems like global warming, pollution.

Objectives

The main objective of this course is to develop an appreciation and an understanding of ecological data management, including: • To identify ecological problems requiring ecological assessment. • To be familiar with ecological data types, their collection. • To perform simple data evaluation in ecology: graphing and tabular types. • To be able to infer ecological decisions of local and global significance. • To understand significance of ecological impact evaluation in project management.

Assessment

60 % -first and second assessments

40 % -final assessment