

SYLLABUS

Name: Ecotoxicology (25-BI-S2-W-E-AN)

Name in Polish: Ekotoksykologia

Name in English: Ecotoxicology

Information on course:

Course offered by department: Faculty of Biological Sciences

Course for department: Faculty of Biological Sciences

Default type of course examination report:

Grading

Language:

English

Short description:

Prerequisites regarding knowledge, skills, and social competences for the course/module:

Elementary knowledge in chemistry, ecology and computational methods in biological sciences.

Student's own work:

- preparation for classes: 10h
- reading the indicated literature: 15h
- preparation for tests: 20h

Description:

Educational aims:

Obtaining knowledge on the impact of pollutants and chemicals on living organisms at various organizational levels and learning about the methods of testing and assessing this impact.

Course content:

Theoretical basis of ecotoxicology. Potential sources of environmental contamination. The effects of environmental toxins on living organisms at a different organizational level (individual, population, ecosystem). Analysis of toxic substances in the environment. Methods used in ecotoxicology - principles of conducting biotests, basic types of biotests.

Bibliography:

Mandatory and recommended reading list:

Forbes V.E., Forbes T.L., 1994. Ecotoxicology in Theory and Practice. Chapman and Hall, London;
Zubcov E., Ene A., 2021. Ecotoxicological methodological guide for environmental monitoring: problematics, laboratory techniques and health risk investigation. BSB27-MONITOX, Joint Operational Programme Black Sea Basin, Institute of Zoology; Center of Research of Hydrobiocenoses and Ecotoxicology. Chisinau;
Rybak J., Kołwzan B., 2011. Environmental Quality Management. Course in English. Theory and Laboratory Practice. PRINTPAP Łódź;
Zakrzewski S.F., 2002. Environmental Toxicology, Third Edition. Oxford University Press.

Learning outcomes:

Intended learning outcomes

Student:

K_W01

explains the basic concepts of ecotoxicology, and lists the effects of environmental toxins on living organisms and biodiversity;

K_K03

is aware of the negative consequences of environmental pollution caused by human activity;

K_U01

correctly uses the equipment in the ecotoxicological laboratory and applies the basic methods of toxicological analysis;

K_U04 selects laboratory methods to determine the toxicity of environmental toxins, interprets the results and draws conclusions based on the conducted experiments.

Course credits in various terms:

<without a specific program>			
Type of credits	Number	First term	Last term
European Credit Transfer System (ECTS)	2	2024/25-L	